

# APPENDIX 1

## Web Site/Server Code

## **Web Site/Server Code**

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## ###addspace.cgi

```
#!/usr/bin/perl
#####
## addspace.cgi - processes additional space requests using Epoch's
## do_approval library function
## written by Karen Eppinger
#####

use lib ($ENV{PERL_XDRIVE_LIB});

use XDrive::Error;
use XDrive::DatabaseO;
use XDrive::DatabaseO::Table::Deal;
use XDrive::DatabaseO::Table::Item;
use XDrive::DatabaseO::Table::UserData;
use XDrive::DatabaseO::Table::DiskAccount;
use XDrive::Client::Actions;
use XDrive::Client::Quota;
use XDrive::Sale::Purchase;
use Mail::Sendmail;
use CGI::Carp qw(fatalsToBrowser);
use CGI;
use XDrive::Template;
use XDrive::CGI qw(:MAIN);
use XDrive::Client::Security;
use XDrive::CGI::Cookie;
use EpochClient_ssl;

use strict;

$ENV{'PATH'} = '/bin';
delete @ENV{qw(IFS CDPATH ENV BASH_ENV)};    # Make %ENV safer

&main();

#####
## main: main function calls all others
##
##


sub main
{
    ##the hash that will be filled in and send to the Epoch function
    my %hData;

    my $oCGI = CGI->new();
    my $oErrors = new XDrive::Error;
    my $oDBH = XDrive::DatabaseO->new();

    my $oCookie = XDrive::CGI::Cookie->new('x_session_info', $oCGI);

    #####
}
```

```

## Validate the user and if an error happens during
## the validation process die redirect to the error cgi
#####
my $oToken = xd_security_check($oDBH,$oCGI,$oErrors);

if ($oErrors->Occurud)
{
    xd_fatal_error($oCGI,$oErrors);
}

$hData{'ipaddr'} = $oCGI->remote_addr();

if ($hData{'ipaddr'}=~/^192.168.2/)
{
    $hData{'ipaddr'}='0.0.0.0';
}

my $sUserName = $oToken->data('user');
# my $sPartnerCode = $oToken->data('partner_code');
my $sPartnerCode = $oCookie->getElement('partner');
my $oTemplate = new XDrive::Template
(
    'partner_code' => $sPartnerCode
);

##used to figure whether to give user the form or process the form
my $sAction = $oCGI->param("action");

## if the action is a request type, we give the user the form
if ($sAction eq 'process')
{
    ##get the date from the form already pre-screened by javascript
    my $returnValue = GetFormData(\%hData,$sUserName,$oCGI,$oDBH);
    if ($returnValue)
    {
        ##call the Epoch function that processes the transaction
        my $sReturnCode = do_approval(%hData);

        ##if we've been approved $return will contain a number that is
        ##7 characters and starts with a Y followed by 7 digits
        ##only change user's quota if approved
        ##else let them know there was a problem; all problems start
with N
        ##return code could be logged in our database to track
transactions

        ##truncate expressions longer than 32 characters
        if (length($sReturnCode)>32)
        {
            $sReturnCode = substr($sReturnCode,0,32);
        }

        if ($sReturnCode=~m/^Y/)
        {
            ##if transaction went through, give them more space
            ##and show them the ok screen

```

```

        my $error =
&WriteToPurchaseDatabase($sReturnCode,\%hData,$sUserName,$oDBH);
        if ($error)
        {
            &TransactionOK($sReturnCode,
\%hData,$sUserName,$oTemplate,$oDBH,$oToken,$oCGI,$oErrors);
            $oDBH->commit();
        }
        else
        {
            ##error inserting into the database
            &TransactionBad('141',$oTemplate,$oErrors);
            $oDBH->rollback();
        }
    }
    elsif ($sReturnCode=~m/^N/)
    {
        ##tell them there was a problem
        ##for some reason we get this returned with
        $sReturnCode=~s/~/;;
        my $error =
&WriteToFailedDatabase($sReturnCode,\%hData,$sUserName,$oDBH);
        &TransactionBad($sReturnCode,$oTemplate,$oErrors);
        $oDBH->commit();
    }
    else
    {
        ##There was a problem connecting to server
        my $error =
&WriteToFailedDatabase('COULDNOTCONNECT\n',\%hData,$sUserName,$oDBH);

        &TransactionBad('COULDNOTCONNECT\n',$oTemplate,$oErrors);
        $oDBH->commit();
    }
}
else
{
    ##this is someone trying to use the
    ##bogus card numbers and isn't one of us
    ##don't bother writing to database because
    ##it is caught before going to Epoch
    &TransactionBad('NMYBADCARD\n',$oTemplate,$oErrors);
}
$oDBH->disconnect();
}
elsif ($sAction eq 'intro')
{
    &ShowIntroPage($oTemplate,$sPartnerCode,$sUserName,$oToken,$oCGI,$oErrors,
;
}
else
{
    &ShowForm($oTemplate,$sUserName,$oErrors);
}
exit;
}

```

```

#####
## GetFormData: Fills in the hash that is required by Epoch's function
## Fill in one field at a time because not all fields on the page should go
## into hash plus a few fields don't come from form
#####

sub GetFormData(\%, $, $, $)
{
    my $hData = shift;
    my $sUserName =shift;
    my $oCGI = shift;
    my $oDBH = shift;

    my $value = 1;

    ##these are mandatory to process the transaction
    ##javascript checks insure users fill the fields with the proper data
    $hData->{'transtype'}='approve';
    $hData->{'co_code'}='xdr';
    $hData->{'pi_code'}= $oCGI->param("pi_code");
    $hData->{'cardnum'}= $oCGI->param("cardnum");
    $hData->{'cardexp'}=$oCGI->param("cardexp");

    ##someone is trying to access from a site other than ours and use the free
    credit card
    if (( $hData->{'cardnum'} eq '4121371122223333') || ($hData->{'cardnum'} eq
    '4111111111111114'))
    {
        if ($hData->{'ipaddr'} ne '0.0.0.0')
        {
            $value=0;
        }
    }

    ##not required but used to check for fraud
    $hData->{'cardname'}= $oCGI->param("cardname");
    $hData->{'street'}=$oCGI->param("address");
    $hData->{'city'}=$oCGI->param("city");
    $hData->{'state'}=$oCGI->param("state");
    $hData->{'zip'}=$oCGI->param("zip");
    $hData->{'phone'}=$oCGI->param("phone");

    ##get email out of the database
    my $oDiskAccount = XDrive:::DatabaseO::Table:::DiskAccount-
>new(undefined,$oDBH);
    $oDiskAccount->loadWhere('USERNAME',$sUserName);
    my $sUserSeq = $oDiskAccount->fetchColumn('USER_SEQ');
    $oDiskAccount->finish();

    my $oUserInfo = XDrive:::DatabaseO::Table:::UserData->new(undefined,$oDBH);
    $oUserInfo->loadWhere('SEQ',$sUserSeq);
    $hData->{'email'}=$oUserInfo->fetchColumn('EMAIL_ADDRESS');
    $oUserInfo->finish();

    return $value;
}

```

```

#####
## ShowIntroPage: called to show the intro page
##
#####

sub ShowIntroPage($,$,$)
{
    my $oTemplate = shift;
    my $sPartnerCode = shift;
    my $sUserName = shift;
    my $oToken = shift;
    my $oCGI = shift;
    my $oErr = shift;

    my ($nUserSeq, $oUserData);

    my $oAction = new XDrive::Client::Actions($oToken,$oCGI);
    my $quotaAvailable = $oAction->QuotaFree();
    $quotaAvailable = sprintf("%2.2f",$quotaAvailable/1C24);

    my $oDiskAccount = XDrive::DatabaseO::Table::DiskAccount-
>new(undefined,undefined);
    $oDiskAccount->loadWhere('USERNAME', $sUserName);
    my $nUserSeq = $oDiskAccount->fetchColumn("USER_SEQ");

    my $oSearch = XDrive::DatabaseO::Search->new($oDiskAccount->fetchDBO());
    my $items = $oSearch->XDGetItemsForSale($nUserSeq);

    my $itemString='';
    my $i;
    for $i(0..$#{$items})
    {
        ##now using the code, get the description for the item in the
        ##proper language. This is kept in List.pm
        my $code = "EPOCH_$items->[$i][1]";
        my $description = $oErr->ReturnMessageGivenCode($code);
        $itemString .= "<LI>$description";
    }

    ## Load the required template HTML files.
    $oTemplate->load('addspace_intro.thtml');
    $oTemplate->tags
    ({
        'products' => $itemString,
        'quota' => $quotaAvailable
    });
    $oTemplate->clear;

    print "Content-type: text/html\n\n";
    print $oTemplate->get();
}

#####

## ShowForm: called to show the user the blank form
##

```

```

#####
sub ShowForm($,$)
{
    my $oTemplate = shift;
    my $sUserName = shift;
    my $oErr = shift;

    my $oDiskAccount = XDrive::DatabaseO::Table::DiskAccount->new(undef, undef);
    $oDiskAccount->loadWhere('USERNAME', $sUserName);
    my $nUserSeq = $oDiskAccount->fetchColumn("USER_SEQ");

    my $oSearch = XDrive::DatabaseO::Search->new($oDiskAccount->fetchDBO());
    my $items = $oSearch->XDGetItemsForSale($nUserSeq);
    my $oDeal = XDrive::DatabaseO::Table::Deal->new(undef, $oDiskAccount->fetchDBO());

    my $itemString='';
    my $i;
    for $i(0..$#{$items})
    {
        $oDeal->loadWhere("ITEM_SEQ", $items->[$i][0]);
        my $pi_code = $oDeal->fetchColumn("PRODUCT_CODE");
        my $code = "EPOCH_".$items->[$i][1];
        my $description = $oErr->ReturnMessageGivenCode($code);

        if ($i == 0)
        {
            $itemString .= '<input type="radio" name="pi_code" value="' .
$pi_code . '" CHECKED>' . $description . '<BR>';
        }
        else
        {
            $itemString .= '<input type="radio" name="pi_code" value="' .
$pi_code . '">' . $description . '<BR>';
        }
    }

    $oDeal->disconnect();

    ## Load the required template HTML files.
    $oTemplate->load('addspace_request.thtml');
    $oTemplate->tags
    ({
        'products' => $itemString
    });
    $oTemplate->clear;

    print "Content-type: text/html\n\n";
    print $oTemplate->get();
}

#####
## WriteToFailedDatabase: if the transaction fails write it to the failed
## _transactions table

```

```

#####
sub WriteToFailedDatabase($,\%,$,,$)
{
    my $sTransCode = shift;
    my $hDash = shift;
    my $sUserName = shift;
    my $oDBH = shift;

    my %transInfo;
    ##write transaction info into database
    my $oDiskAccount = XDrive::DatabaseO::Table::DiskAccount-
>new(undefined,$oDBH);
    $oDiskAccount->loadWhere('USERNAME', $sUserName);

    $transInfo{'user_seq'} = $oDiskAccount->fetchColumn('USER_SEQ');
    $oDiskAccount->finish();
    $transInfo{'trans_code'} = $sTransCode;
    $transInfo{'product_code'} = $hDash->{'pi_code'};
    $transInfo{'IP'} = $hDash->{'ipaddr'};

    my $intoDB = XDrive::Sale::Purchase->new($oDBH);
    my $error = $intoDB->FailedTransaction(\%transInfo);

    return $error;
}

#####
## WriteToPurchaseDatabase: write the user transaction info to th user_purchase
## table
#####

sub WriteToPurchaseDatabase($,\%,$,,$)
{
    my $sTransCode = shift;
    my $hDash = shift;
    my $sUserName = shift;
    my $oDBH = shift;

    my %transInfo;
    ##write transaction info into database
    my $oDiskAccount = XDrive::DatabaseO::Table::DiskAccount-
>new(undefined,$oDBH);
    $oDiskAccount->loadWhere('USERNAME', $sUserName);

    $transInfo{'user_seq'} = $oDiskAccount->fetchColumn('USER_SEQ');
    $transInfo{'account_seq'} = $oDiskAccount->fetchColumn('USER_SEQ');
    $oDiskAccount->finish();
    $transInfo{'trans_code'} = $sTransCode;
    $transInfo{'product_code'} = $hDash->{'pi_code'};

    my $intoDB = XDrive::Sale::Purchase->new($oDBH);
    my $error = $intoDB->Checkout(\%transInfo);
    return $error;
}
#####

```

```

## TransactionOK: if the tranaction was processed and ok'ed, we add the proper
space to the
## user's xdrive and let them know the space has been added
#####
#####

sub TransactionOK($,\%,\$,\$)
{
    my $sTransCode = shift;
    my $hDash = shift;
    my $sUserName = shift;
    my $oTemplate = shift;
    my $oDBH = shift;
    my $oToken = shift;
    my $oCGI = shift;
    my $oErr = shift;

    my $oDiskAccount = XDrive:::DatabaseO::Table::DiskAccount-
>new(undef,$oDBH);
    $oDiskAccount->loadWhere('USERNAME', $sUserName);
    my $userSeq= $oDiskAccount->fetchColumn('USER_SEQ');

    my @aCodes=split(/\|/, $sTransCode);
    $aCodes[1]=~s/~/~/;
    my $sNewQuota;
    my $sAddedSpace;

    my $oDeal = XDrive:::DatabaseO::Table::Deal->new(undef,$oDBH);
    $oDeal->loadWhere('PRODUCT_CODE', $hDash->{'pi_code'});
    my $itemSeq = $oDeal->fetchColumn('ITEM_SEQ');
    my $oItem = XDrive:::DatabaseO::Table::Item->new(undef,$oDeal-
>fetchDBO());
    $oItem->loadWhere('SEQ', $itemSeq);
    my $sCode = "EPOCH_" . $oItem->fetchColumn('CODE');
    my $sDescription = $oErr->ReturnMessageGivenCode($sCode);

    my $sSpaceToAdd = $oItem->fetchColumn('NAME');

    my $oAction = new XDrive:::Client::Actions($oToken,$oCGI);
    $sNewQuota = $sSpaceToAdd + $oAction->QuotaLimit();

    ##now set the new quota
    ##in the database and in the ncftpd database
    ##used during testing to reset occasionally
    ##$sNewQuota = 25600;
    XDQuotaLimit($sUserName, $sNewQuota);

    ##insert into the spool to update ftp account

    ## Load the required template HTML files.
    $oTemplate->load('addspace_ok.thtml');
    $oTemplate->tags
    ({
        'transactionCode' => $aCodes[1],
        'addedSpace' => $sDescription
    });
    $oTemplate->clear;
    print "Content-type: text/html\n\n";
}

```

```

    print $oTemplate->get();
}

#####
## TransactionBad: If we get an error code beginning with and N, it's a
## declined transaction
## get the error code and give user the bad transaction page with error code
#####

sub TransactionBad($,$)
{
    my $sTransCode = shift;
    my $oTemplate = shift;
    my $oErrors   = shift;

    if ($sTransCode!~/^\d+$/)
    {
        ##error codes contains
        $sTransCode="EPOCH_" . $sTransCode;
        chop($sTransCode);
    }

    ##$oErrors->AddErrorByErrorCode($sTransCode);

    $oErrors->AddErrorByCodeIncludes($sTransCode);
    my $sReturnError=$oErrors->Message($sTransCode);

    if(!$sReturnError)
    {
        $sReturnError = "There was an problem processing your transaction.
Please try again.";
    }

    ## Load the required template HTML files.
    $oTemplate->load('addspace_bad.thtml');
    $oTemplate->tags
    ({
        'error' => $sReturnError
    });
    $oTemplate->clear;
    print "Content-type: text/html\n\n";
    print $oTemplate->get();
}

```

## **###client\_info.cgi**

```
#!/usr/bin/perl

use lib ($ENV{PERL_XDRIVE_LIB});
use CGI;

exit &main;

sub main ()
{
    my $oCGI = CGI->new();

    ##get this info from Michael Ryan's or Gavin's client
    my $sUsername      = $oCGI->param('username');
    my $sClientType    = $oCGI->param('client_type');
    my $sClientVersion = $oCGI->param('client_version');
    my $bFirstTime     = $oCGI->param('first_time');

    ##hash of NT info for current version of client
    ##version 1.0 is 0 in the array of upgrades
    my %infoNT;
    my @featuresNT;
    $infoNT{'current_version'} = '1.0';
    $infoNT{'force_upgrade'} = 0;
    $infoNT{'client_url'} = 'http://www.xdrive.com/download/xdrivent.exe';
    ##holds the first array subscript in which upgrade info is kept
    $infoNT{'1.0'} = 0;
    $featuresNT[0][0] = 'beta release';
    ## $featuresNT[0][1] = 'First new feature';
    ## $featuresNT[0][2] = 'Second new feature';

    ##hash of 95 info for current version of client
    ##version 2.03 is 0 in the array of upgrades
    my %info95;
    my @features95;
    $info95{'current_version'} = '2.03';
    $info95{'force_upgrade'} = 0;
    $info95{'client_url'} = 'http://www.xdrive.com/download/xdrive.exe';
    $info95{'2.00'} = 0;
    $info95{'2.01'} = 1;
    $info95{'2.02'} = 2;
    $info95{'2.03'} = 3;
    $info95{'2.04'} = 4;
    $features95[3][0] = 'automatic proxy support.';

    ## examples of other features
    ## $features95[0][1] = '2.03 feature 1';
    ## $features95[0][2] = '2.03 feature 2';
    ## $features95[1][0] = '2.04 feature 1';
    ## $features95[1][1] = '2.04 feature 2';

    my $returnString='';
    my $ref_to_hash;
    my $ref_to_array;
```

```

##point to hash and array for type of client
##this way no need to create separate functions
if ($sClientType =~ /^xdwin9x/)
{
    $ref_to_hash=\%info95;
    $ref_to_array=\@features95;
}
elsif ($sClientType =~ /^xdwinnt/)
{
    $ref_to_hash=\%infoNT;
    $ref_to_array=\@featuresNT;
}
else {}

if (($sClientType =~ /^xdwin9x/) || ($sClientType =~ /^xdwinnt/))
{
    ##if the user's version of the client is older than the
    ##current version, ask them to upgrade and tell them
    ##about new features
    my $feature_text='';
    if ($ref_to_hash->{'current_version'} > $sClientVersion)
    {
        ##get all features from the version 1 above the user's
        ##to the current version
        my $array_number_start = $ref_to_hash->{$sClientVersion} + 1;
        my $array_number_end = $ref_to_hash->{$ref_to_hash-
>{'current_version'}};
        ##Assemble a big string of new features for
        ##newer versions than user has
        my ($i,$j);
        for $i ($array_number_start .. $array_number_end)
        {
            for $j (0 .. $#{$ref_to_array->[$i]}) {
                $feature_text .= " - ".$ref_to_array->[$i][$j] .
                "\n";
            }
        }
    }

    $returnString = join ("\n",
    "client_version=$ref_to_hash->{'current_version'}",
    "force_upgrade=$ref_to_hash->{'force_upgrade'}",
    "client_url=$ref_to_hash->{'client_url'}",
    "client_text=$feature_text",
    );
}
else
{
    $returnString = join ("\n",
    "client_version=0.0",
    "force_upgrade=-1",
    "client_url=No url. Please contact X:drive",
    "client_text=",
    );
}

```

```
print $oCGI->header();
print $returnString;

##if ($bFirstTime)
##{
##    ## Record the version number
##    ## XDClientFirstTimeUse
##    ##
##    ## $sUsername,
##    ## $sClientType,
##    ## $sClientVersion
##    ## );
##}
}
```

### ###cookie.cgi

```
#!/usr/bin/perl
# Written by Martin Hald <mhald@geotribe.com> to verify that the user is
# good to login, if they are then log them in and otherwise redirect to
# a not authorized page.

use strict;
use lib ($ENV{PERL_XDRIVE_LIB});
use XDrive::Database0::Table::DiskAccount;
use XDrive::Database0::Table::UserSettings;
use XDrive::Database0::Table::UserQuota;
use XDrive::Database0::Table::Language;
use XDrive::Database0::Search;

use CGI;
use XDrive::CGI::Cookie;
use CGI::Carp qw(fatalsToBrowser);

use XDrive::CGI;
use XDrive::Client::Security;
use XDrive::Error;
use XDrive::Template;
use XDrive::Library;
use XDrive::Database0;
use Mail::Sendmail;

&main;
exit;

sub main
{
    my $oCGI      = new CGI;
    my $oErr      = new XDrive::Error;
    my $oDBO      = new XDrive::Database0;
    my $oCookie   = new XDrive::CGI::Cookie('x_session_info', $oCGI);

    my $oToken;
    my $sToken;
    my $sUsername;
    my $sPartnerCode;

    my $bSecurity = $oCGI->param('bSecurity');
    my $sPartnerToken = $oCGI->param('partner_token');

    my $passed_lang = $oCGI->param('language');

    #####
    ## Attempt to authenticate the user by using one of the following two
    ## authentication methods: username/password pair or partner token
    ## authentication.
    #####
    if (! defined $sUsername && length($sPartnerToken) > 20)
    {
        authPartnerUser($oCGI,$oErr,$oDBO,\$sUsername,\$oToken,
```

```

        \$sPartnerCode,\$sPartnerToken);
    $sToken = $oToken->name();
}
else
{
    authWebSiteUser($oCGI,$oErr,$oDBO,\$sUsername,\$oToken);
    $sPartnerCode = 'xdrv';
}

#####
## If an error occurred while trying to create a token then redirect
## the user to the error page.
#####
if ($oErr->Occurred)
{
    $oDBO->disconnect;
    xd_fatal_error($oCGI,$oErr);
    exit;
}

#####
## If we have gotten here then we have an authenticated user.
#####

#####
## Build and print out cookies
#####
my $sLanguage = getLanguage($oDBO,$sUsername);

#####
##check if user's language is the same as passed language
if ((length($passed_lang) > 0) && $sLanguage ne $passed_lang)
{
    ##update db here to new language
    setLanguage($oDBO,$sUsername,$passed_lang);
    ##update session to new language
    $sLanguage = $passed_lang;
}

##delete the promo cookie; this will not be set here and we
##don't want an old one hanging out
##promo cookies should be set in promo.cgi
$oCookie->deleteElement('promo') if $oCookie->getElement('promo');

$oCookie->setElement
(
    'language' => $sLanguage,
    'partner' => $sPartnerCode,
);

print "Set-Cookie: ". $oCookie->asString();
print "Set-Cookie: SST=$sToken; domain=.xdrive.com; path=/\n"
if $sPartnerCode ne 'xdrv';

#####
## write user login to the database

```

```

#####
&incrementLoginNumber($oDBO,$sUsername,$sLanguage,$sPartnerCode);

#####
## Send the user off into thier file explorer
#####
if ($ENV{'HTTP_USER_AGENT'} =~ /^xdwin/)
{
    print $oCGI->redirect("?sst=".$oToken->name()."&sid=0");
}
else
{
    xd_web_open($oCGI, "", "", \%ENV, $bSecurity);
}

$oDBO->disconnect;
return 0;
}

sub incrementLoginNumber()
{
    my $oDBO = shift;
    my $sUsername = shift;
    my $sLanguage = shift;
    my $sPartnerCode = shift;

    my $oDiskAccount = XDrive::Database0::Table::DiskAccount-
>new(undefined,$oDBO);
    $oDiskAccount->loadWhere("USERNAME", $sUsername);
    $oDiskAccount->finish();
    my $timesLoggedIn = $oDiskAccount->fetchColumn("LOGIN_NUM");
    my $user_seq = $oDiskAccount->fetchColumn("USER_SEQ");

    if ($timesLoggedIn)
    {
        $timesLoggedIn++;
    }
    else
    {
        $timesLoggedIn=1;
    }

    $oDiskAccount->setColumn("LOGIN_NUM", $timesLoggedIn);
    $oDiskAccount->setColumn("LAST_LOGIN", XDToday());

    my $status = $oDiskAccount->update();

    if ($status > -1)
    {
        $oDiskAccount->commit();
        $oDiskAccount->finish();

        ##give user extra 10MB if 10th login
        if ($timesLoggedIn == 10)
        {

```

```

        my $oUserQuota = XDrive::DatabaseO::Table::UserQuota-
>new(undefined, $oDBO);
        $oUserQuota->loadWhere("USER_SEQ", $user_seq);
        my $additional_quota = $oUserQuota-
>incrementQuota($user_seq, 10240);
        if ($additional_quota > 0)
        {
            &send_email($user_seq, $oDBO,
$additional_quota, $sLanguage, $sPartnerCode);
        }
    }
}
else
{
    # $oDiskAccount->rollback();
}

}

sub send_email
{
    my $user_seq = shift;
    my $oDBO = shift;
    my $additional_quota = shift;
    my $sLanguage = shift;
    my $sPartnerCode = shift;

    ##comes in as k, change to megabytes
    my $mbs = $additional_quota/1024;

    my $oUserData = XDrive::DatabaseO::Table::UserData->new(undefined, $oDBO);
    $oUserData->loadWhere("SEQ", $user_seq);
    my $email_address = $oUserData->fetchColumn("EMAIL_ADDRESS");
    my $name_first = $oUserData->fetchColumn("NAME_FIRST");
    my $name_last = $oUserData->fetchColumn("NAME_LAST");

    my $oTemplate = new XDrive::Template
    ({
        'language'      => $sLanguage,
        'partner_code' => $sPartnerCode,
    });

    $oTemplate->load('received_10MB_10logins.thtml');
    $oTemplate->tags({
        'mbs' => $mbs,
    });
    $oTemplate->clear();
    my $message = $oTemplate->get;

    my %toXdrive =
    (
        To      => "$name_first $name_last <$email_address>",
        Bcc    => '',
        From   => "support@xdrive.com",
        Message => $message,
        Subject => "Congratulations!"
    );
}

```

```

        sendmail(%toXdrive);
    }

sub authPartnerUser
{
    my $oCGI = shift;
    my $oErr = shift;
    my $oDBO = shift;
    my $rsUsername = shift;
    my $roToken = shift;
    my $rsPartnerCode = shift;
    my $sPartnerToken = shift;

    my $oCookie = new XDrive::CGI::Cookie('x_session_info', $oCGI);

    my $oPartnerToken = new Token
    ({
        'err' => $oErr,
        'dbh' => $oDBO,
    });
    $oPartnerToken->load($sPartnerToken);

    return if $oErr->Occurud;

    $$roToken = new Token
    ({
        'dbh' => $oDBO,
        'err' => $oErr,
        'user_sequence' => $oPartnerToken->data('user_seq'),
    });
    $$roToken->create();

    return if $oErr->Occurud;

    ### Edited by Justin so that the partner_code is looked for
    ### in the cookie instead of the token table.
    $rsPartnerCode = $oPartnerToken->data('partner_code');
    ####$rsPartnerCode = $oCookie->getElement('partner');
    $rsUsername = $oPartnerToken->data('user');

    $$roToken->data('ip', $ENV{REMOTE_ADDR});
    $$roToken->data('browser', $ENV{HTTP_USER_AGENT});
    $$roToken->data('user', $$rsUsername);
    $$roToken->data('user_seq', $oPartnerToken->data('user_seq'));
    $$roToken->data('partner_code', $rsPartnerCode);
    $$roToken->data('disk_account_seq', $oPartnerToken-
>data('disk_account_seq'));
    $$roToken->save;

    $oPartnerToken->delete();
}

sub authWebSiteUser
{
    my $oCGI = shift;
    my $oErr = shift;

```

```

my $oDBO = shift;
my $rsUsername = shift;
my $roToken = shift;

my $sPassword = $oCGI->param('pass');
$rsUsername = $oCGI->param('user');

$oCGI->param('user');

if (xd_auth_password($rsUsername,$sPassword,$oDBO))
{
    ## Login the user info X:drive and get the session token
    $roToken = xd_login($oCGI, $rsUsername, $oErr, $oDBO);
}
else
{
    {
        $oErr->AddErrorByErrorCode('501');
    }
}

sub getLanguage
{
    my $oDBO = shift;
    my $sUsername = shift;

    my $language;

    ## get the user's language out of the database
    my $oDiskAccount = XDrive::DatabaseO::Table::DiskAccount-
>new(undefined,$oDBO);
    $oDiskAccount->loadWhere("USERNAME", $sUsername);
    $oDiskAccount->finish;
    my $userSeq = $oDiskAccount->fetchColumn("USER_SEQ");

    my $oUserSettings = XDrive::DatabaseO::Table::UserSettings-
>new(undefined,$oDBO);
    $oUserSettings->loadWhere("USER_SEQ",$userSeq);
    $oUserSettings->finish;
    my $language = $oUserSettings->fetchColumn("LANGUAGE");

    if ($language eq '')
    {
        $language = 'english';
    }
    else
    {
        ## Get language from database given code
        my $oLanguage = XDrive::DatabaseO::Table::Language-
>new(undefined,$oDBO);
        $oLanguage->loadWhere("SEQ",$language);
        $oLanguage->finish;
        $language = $oLanguage->fetchColumn("CODE");
    }

    return $language;
}

```

```

sub setLanguage
{
    ##set the LANGUAGE column of the User_Settings table to passed language

    my $oDBO = shift;
    my $sUsername = shift;
    my $language = shift;

    my ($rv,$errorCode);

    ## get the user's language out of the database
    my $oDiskAccount = XDrive::DatabaseO::Table::DiskAccount->new(undefined,$oDBO);
    ##grab right table
    $oDiskAccount->loadWhere("USERNAME", $sUsername);
    $oDiskAccount->finish;
    my $userSeq = $oDiskAccount->fetchColumn("USER_SEQ");

    my $oUserSettings = XDrive::DatabaseO::Table::UserSettings->new(undefined,$oDBO);
    $oUserSettings->loadWhere("USER_SEQ",$userSeq);
    $oUserSettings->finish;

    ##grab the seq number of the LANGUAGE being passed
    my $oLanguage = XDrive::DatabaseO::Table::Language->new(undefined,$oDBO);
    $oLanguage->loadWhere("CODE",$language);
    $oLanguage->finish();
    my $seq_lang = $oLanguage->fetchColumn("SEQ");

    eval
    {
        ##
        ##set language here
        $rv = 0;
        $oUserSettings->setColumn('LANGUAGE',$seq_lang);
        $rv = $oUserSettings->update();
    };
    if ($rv == 0)
    {
        $oUserSettings->rollback();
        $errorCode = 0;
    }
    else
    {
        $oUserSettings->commit();
        $errorCode = 1;
    }
    return $errorCode;
}

```

### **###download\_client.cgi**

```
#!/usr/bin/perl
## Written by Karen Eppinger
## Script that shows the 'download the client' page
## it can no longer be static html because we need to
## do some checking on whether the user is from a partner or not
## if so, make sure to let them know what their X:drive login name
## is if it differs from their partner login

use strict;
use lib ($ENV{PERL_XDRIVE_LIB});

use CGI;
use XDrive::Library;
use XDrive::Template;
use XDrive::Error;
use XDrive::DatabaseO;
use XDrive::Client::Security;
use XDrive::DatabaseO::Table::ResellerUserMap;
use XDrive::DatabaseO::Table::Reseller;

&main;
exit;

sub main
{
    ## Load the session token
    my $oErr      = new XDrive::Error;
    my $oDBO      = new XDrive::DatabaseO;
    my $oCGI      = new CGI;

    my $oToken = xd_security_check($oDBO,$oCGI,$oErr);
    my $oCookie = new XDrive::CGI::Cookie('x_session_info', $oCGI);

    if ($oErr->Occurud)
    {
        xd_fatal_error($oCGI,$oErr);
        $oDBO->disconnect();
        exit;
    }

    my $partner_code = $oToken->data('partner_code');
    my $language     = $oCookie->getElement('language') || 'english';

    my $oForm = new XDrive::Template
    ({
        'partner_code' => $partner_code,
        'language'     => $language,
    });

    $oForm->load('download_client.thtml');

    ##if we are coming from a partner, make sure partner login
    ##and X:drive login match
```

```

my $reseller_username;
my $reseller_name;
my $partner_warning;
my $username;

if ($partner_code ne 'xdrv')
{
    my $user_seq = $oToken->data('user_seq');
    $username = $oToken->data('user');

    my $oResellerUserMap = XDrive::DatabaseO::Table::ResellerUserMap->new(undefined, $oDBO);
    my $oReseller = XDrive::DatabaseO::Table::Reseller->new(undefined, $oDBO);
    $oReseller->loadWhere("CODE", $partner_code);
    $reseller_name = $oReseller->fetchColumn("NAME");
    $oResellerUserMap->loadWhere("USER_SEQ", $user_seq);
    $reseller_username = $oResellerUserMap->fetchColumn("ALIAS");

    if ($reseller_username ne $username)
    {
        ##load the text for the warning message
        my $oWarning = new XDrive::Template
        ({
            'partner_code' => $partner_code,
            'language' => $language,
        });

        $oWarning->load('download_client_warning.thtml');
        $oWarning->tags
        ({
            'reseller_name' => $reseller_name,
            'reseller_username' => $reseller_username,
            'username' => $username,
        });

        $oWarning->clear();
        $partner_warning = $oWarning->get();
    }
}

$oForm->tags
({
    'partner_warning' => $partner_warning,
    'reseller_name' => $reseller_name,
    'reseller_username' => $reseller_username,
    'username' => $username,
});

$oForm->clear();

print $oCGI->header(), $oForm->get;

$oDBO->disconnect();

```

```
    return 0;  
}
```

### ###email\_change.cgi

```
#!/usr/bin/perl

use lib ($ENV{PERL_XDRIVE_LIB});

use XDrive::Client::Security;
use XDrive::DatabaseO;
use XDrive::DatabaseO::Table::UserData;
use XDrive::DatabaseO::Table::DiskAccount;

use CGI::Carp qw(fatalsToBrowser);
use CGI;
use XDrive::Library;
use XDrive::Template;
use XDrive::Security;
use XDrive::CGI;
use XDrive::Error;

use strict;

&main;
exit;

sub main
{
    my $oCGI = CGI->new();
    my $oErr = new XDrive::Error;
    my $oDBO = new XDrive::DatabaseO;

    #####
    ## Check the token is valid and is an error occurred then
    ## redirect with a fatal error
    #####
    my $oToken = xd_security_check($oDBO, $oCGI, $oErr);

    if ($oErr->Occurud)
    {
        xd_fatal_error($oCGI,$oErr);
        exit;
    }

    my $sUserName = $oToken->data('user');
    my $sOldEmail = $oCGI->param('oldEmail');
    my $sNewEmail = $oCGI->param('newEmail');

    if (($sOldEmail eq '') || ($sNewEmail eq ''))
    {
        my $sMessage = $oErr->ReturnMessageGivenCode(1350);
        XDErrorToBrowser("",$sMessage,undef,$oToken);
    }

    ##first, get user_seq from the disk_account table
    ##since we only have the user name, need to do this first
```

```

my $oDiskAccount = XDrive::DatabaseO::Table::DiskAccount-
>new(undef, undef);
$oDiskAccount->loadWhere('USERNAME', $sUserName);
my $nUserID = $oDiskAccount->fetchColumn('USER_SEQ');

##now that we have that, get the email address from
##user table using the user_seq number to pull the seq number
my $oUserInfo = XDrive::DatabaseO::Table::UserData->new(undef,
$oDiskAccount->fetchDBO());
$oUserInfo->loadWhere('EMAIL_ADDRESS', $sNewEmail);

##if a sequence number is returned, there is already a record
##in the database with that email address. don't allow to change

my $nSeqNumber = $oUserInfo->fetchColumn('SEQ');

if ($nSeqNumber)
{
    $oUserInfo->disconnect();
    my $sMessage = $oErr->ReturnMessageGivenCode(1351);
    XDErrorToBrowser("", $sMessage, undef, $oToken);
}
else
{
    $oUserInfo->loadWhere('SEQ', $nUserID);
    my $sEmailinDB = $oUserInfo->fetchColumn('EMAIL_ADDRESS');

    if ($sOldEmail eq $sEmailinDB)
    {
        ##set email in class
        $oUserInfo->setColumn('EMAIL_ADDRESS', $sNewEmail);
        ##now update database
        $oUserInfo->update();

        my $oTemplate = new XDrive::Template
            ({'partner_code' => $oToken-
>data('partner_code')});
        $oTemplate->load('pr_changeemail_ok.html');
        print "Content-type: text/html\n\n";
        print $oTemplate->get();
    }
    else
    {
        $oUserInfo->disconnect();
        my $sMessage = $oErr->ReturnMessageGivenCode(1352);
        XDErrorToBrowser("", $sMessage, undef, $oToken);
    }
}
$oUserInfo->commit();
$oUserInfo->finish();
$oUserInfo->disconnect();
}

```

### **###error.cgi**

```
#!/usr/bin/perl

use lib ($ENV{PERL_XDRIVE_LIB});
use XDrive::Error;
use XDrive::Template;
use CGI;

&main;
exit;

sub main
{
    my $oCGI = new CGI;
    my ($sErrorCode) = $ENV{QUERY_STRING} =~ /error=([^&\=]+)/;
    my $oError = new XDrive::Error;
    my $sError = $oError->ReturnMessageGivenCode($sErrorCode);
    my $oTemplate = new XDrive::Template( {'partner_code' => 'xdrv'} );
    $oTemplate->load('generic_error.thtml');
    $oTemplate->tags
        ({
            'message' => $sError
        });
    $oTemplate->clear();
    print $oCGI->header(), $oTemplate->get;
}
```

### ###explorer.cgi

```
#!/usr/bin/perl
## Written by Martin Hald <mhald@uci.edu> on Tue May 25 15:23:31 PDT 1999.
## Program to build the file explorer which is itself a popup window.

use strict;
use lib ($ENV{PERL_XDRIVE_LIB});
#use vars qw(@ISA);

#@ISA = qw(XDrive::CGI);

use CGI qw(param header);
use CGI::Carp qw(fatalsToBrowser);
use Date::Format;
use HTTP::Icons;
# use XDrive::CGI qw(:MAIN);
use XDrive::Client::Security;
use XDrive::Client::Quota;
use XDrive::Library;
use XDrive::Template;
use XDrive::DatabaseO;
use XDrive::DatabaseO::Table::UserSettings;
use XDrive::DatabaseO::Table::DiskAccount;
use XDrive::DatabaseO::Table::UserData;
use XDrive::Error;

&main;

exit(0);

sub main
{
    #####
    ## Global variables
    #####
    my $oToken;          ## Xdrive Token
    my $sUsername;       ## username
    my $sPath;           ## path for index
    my $sSST;            ## Token name
    my $bEditExt;        ## Allow extensions to be edited?
    my $bFirstTime;      ## First time they've logged in...
    my $bExtraHelp;      ## Print extra help
    my $bMarketing;      ## does user want to receive offers from other
    companies
    my $bNewsletter;     ## does user want to receive our newsletter
    my $sPartner;         ## partners name
    my $g_sFrameSize;    ## breakdown of the centerview frame
    my $g_sFrameBanner;  ## banner view frame information

    my $oDBO    = XDrive::DatabaseO->new(undef, undef);
    my $oCGI   = new CGI;
    my $oErr   = new XDrive::Error;
    my $oCookie = new XDrive::CGI::Cookie('x_session_info', $oCGI);
```

```

#####
## If the user has bookmarked the X:drive service then redirect
## them back to the homepage
#####
if (! length($oCGI->param('sst')) && ! length($oCGI->cookie('SST')))
{
    print $oCGI->redirect('/cgi-bin/web_unauthorized.cgi?error=804');
    $oDBO->disconnect();
    return 0;
}

#####
## Check the security and if an error occurs
#####
$oToken = xd_security_check($oDBO,$oCGI,$oErr);

if ($oErr->Occurud) {
    $oDBO->disconnect();
    xd_fatal_error($oCGI, $oErr);
    exit;
}

#####
## Now we know we have a valid session so pull the partner name
## from a cookie if available or clear the variable
#####
# $sPartner = $oToken->data('partner_code');
$sPartner = $oCookie->element('partner');
$sPartner = "xdrv" if ($sPartner eq "");

## Load the required template HTML files.
# my $oFrame = new XDrive::Template
#     ({
#         'partner_code' => $oToken->data('partner_code')
#     });

#####
## Edited by Justin to check the cookie instead of
## the token table for the partner_code.
my $oFrame = new XDrive::Template
    ({
        'partner_code' => $oCookie->element('partner')
    });

## If the request comes from the windows app the give back a simplified
template
$oFrame->load("acct_explorer_frame.thtml");

## Assign globally used variables
$sPath = $oCGI->param('sFolderCurrent');
$sSST = $oToken->name;
$sUsername = $oToken->data('user');

```

```

## User settings
my $oDiskAccount = XDrive::DatabaseO::Table::DiskAccount->new(undef,
$dbo);

my $oUserSettings = XDrive::DatabaseO::Table::UserSettings->new(undef,
$dbo);
my $oUserData = XDrive::DatabaseO::Table::UserData->new(undef, $dbo);

$oDiskAccount->loadWhere("USERNAME", $sUsername);
$oUserSettings->loadWhere("USER_SEQ", $oDiskAccount-
>fetchColumn("USER_SEQ"));
$oUserData->loadWhere("SEQ", $oDiskAccount->fetchColumn("USER_SEQ"));

$bEditExt    = $oUserSettings->fetchColumn("FILE_EXT_EDITABLE") == 1 ?
'true' : 'false';
$bExtraHelp  = ($oUserSettings->fetchColumn("EXTRA_HELP") == 1) ? 'true' :
>false';
$bMarketing = $oUserSettings->fetchColumn("OPT_MARKETING") == 1 ? 'true' :
>false';
$bNewsletter= $oUserSettings->fetchColumn("OPT_NEWSLETTER") == 1 ? 'true' :
>false';

my $firstName = $oUserData->fetchColumn("NAME_FIRST");
my $lastName  = $oUserData->fetchColumn("NAME_LAST");

my $first = $oCGI->param('first');
$bFirstTime = $first eq 'yes' ? 'true' : 'false';

## Frame settings
if ($sPartner eq 'cc' || $sPartner eq 'qupa')
{
    $g_sFrameSize  = '100%';
    $g_sFrameBanner = '';
}
else
{
    $g_sFrameSize  = '103,*';
    $g_sFrameBanner = '<FRAME NAME="banner"' .
        ' SRC="/cgi-bin/ads.cgi" SCROLLING=NO BORDER=0 ' .
        ' FRAMEBORDER=0 MARGINWIDTH=0 MARGINHEIGHT=0 ' .
        ' TOPMARGIN=0 LEFTMARGIN=0>';
}

##get the language information from the cookie
##if no cookie or not set, set to english
my %session_info = $oCGI->cookie('x_session_info');
my $language;

if ($session_info{'language'} ne '') {
    $language = $session_info{'language'};
}
else {
    $language = 'english';
}

my $clientDownload = $oCGI->param('client');

```

```

my $sCenterPage = 'centerview.thtml';
if ($clientDownload eq 'getclient') {
    $sCenterPage = 'download_client.thtml';
}

## Set the token name and session ID in the navigation form so that popup
## windows have access to them and the do not need to be passed around.
$oFrame->tags
  ({
    'sSST' => $sSST,
    'bSettingEditExtensions' => $bEditExt,
    'sPartner' => $sPartner,
    'bExtraHelp' => $bExtraHelp,
    'bFirstTime' => $bFirstTime,
    'bMarketing' => $bMarketing,
    'bNewsletter' => $bNewsletter,
    'centerPage' => $sCenterPage,
    'userName' => $sUsername,
    'firstName' => $firstName,
    'lastName' => $lastName,
    'frameBanner' => $g_sFrameBanner,
    'frameSize' => $g_sFrameSize,
    'language' => $language
  });

## Print out the HTML and exit
$oFrame->clear();
print $oCGI->header(), $oFrame->get;

$oDiskAccount->finish();
$oUserSettings->finish();
$oUserData->finish();

$oDBO->disconnect();
}

```

### **###explorer\_user\_data.cgi**

```
#!/usr/bin/perl
## Written by Martin Hald <mhald@uci.edu> on Tue May 25 15:23:31 PDT 1999.
## Program to build the file explorer which is itself a popup window.

use strict;
use lib ($ENV{PERL_XDRIVE_LIB});

use vars qw(@ISA);

@ISA = qw(XDrive::CGI);

use Data::Dumper;
use CGI;
use CGI::Carp qw(fatalsToBrowser);
use Token;
use XDrive::CGI qw(:MAIN);
use XDrive::Client::Actions;
use XDrive::Client::Security;
use XDrive::DatabaseO;
use XDrive::Library;
use XDrive::Template;
use XDrive::Error;

&main;
exit;

sub main
{
    my $oCGI = new CGI;
    my $oErr = new XDrive::Error;
    my $oDBO = new XDrive::DatabaseO;

    my $oToken = xd_security_check($oDBO,$oCGI,$oErr) ;

    if ($oErr->Occurud)
    {
        xd_fatal_error($oCGI,$oErr);
        exit;
    }

    my $sFolder;
    my $oAction = new XDrive::Client::Actions($oToken,$oCGI);

    $sFolder = $oCGI->param('folder_current');

    ## Load the required template HTML files.
    my $oFrame = new XDrive::Template
    ({
        'partner_code' => $oToken->data('partner_code')
    });

    if ($ENV{'HTTP_USER_AGENT'} =~ /^xdwin/)
    {
```

```
        $oFrame->load("acct_user_data_xd_win.thtml");
    }
else
{
    $oFrame->load("acct_user_data.thtml");
}

## Set the token name and session ID in the navigation form so that popup
## windows have access to them and they do not need to be passed around.
$oFrame->tags
(
{
    'sst' => $oAction->SST(),
    'sid' => $oAction->SID(),
    'usage_total' => $oAction->QuotaLimit(),
    'usage_used' => $oAction->QuotaUsed(),
    'stuff' => $oAction->DiskAccountXML($sFolder)
});
$oFrame->clear;

$oAction->DisconnectDB();

## Print out the HTML and exit
print "Cache-Control: no-cache\n";
print "pragma: no-cache\n";
print "Content-type: text/html\n\n";
print $oFrame->get;
}
```

## **###file\_load.cgi**

```
#!/usr/bin/perl
# Program written by Martin Hald <mhalld@uci.edu> to fetch files from a
# storage area or database and return them via a HTTP socket to the user.

use strict;
use CGI qw(header param);
use CGI::Carp 'fatalstoBrowser';

## The HTTP::MimeTypes module was a quick module that I wrote that reads the
## standard apache mime.types file, parses it and given any known extension
## translates it to the correct mimetype.

use lib ($ENV{PERL_XDRIVE_LIB});

use HTTP::MimeTypes;
use XDrive::Client::Actions;
use XDrive::Client::Security;
use XDrive::DatabaseO::Table::DiskItemShare;
use XDrive::DatabaseO;
use XDrive::Library;
use XDrive::Error;

## We have two security methods when downloading files:
## 1) tokens
## 2) claim checks
## to deal with this we simply security method we are using and process the
## request.

&main;
exit;

sub main
{
    my $oCGI = new CGI;
    my $oErr = new XDrive::Error;
    my $oDBO = new XDrive::DatabaseO;

    my $sFileCurrent; ## Current File
    my $oAction;      ## Action object

    #####
    ## Process the request as a share a file pickup if the claim_check
    ## param is available
    #####
    if (param('claim_check'))
    {
        my $oShare;
        $oShare = XDrive::DatabaseO::Table::DiskItemShare->new();
        $oShare->loadWhere("random_key", param('claim_check'));

        $oAction = new XDrive::Client::Actions($oShare,$oCGI);
        $sFileCurrent = join
        (

```

```

        '/',
        $oShare->fetchColumn("ITEM_PATH"),
        $oShare->fetchColumn("ITEM_NAME")
    );
}

#####
## Otherwise it is an request from the browser or PC client
## side program so let the actions object handle the request
#####
else
{
#####
## Attempt to authenticate the user and if that fails
## then redirect to the error CGI
#####
my $oToken = xd_security_check($oDBO, $oCGI, $oErr);

if ($oErr->Occurud)
{
    xd_fatal_error($oCGI,$oErr);
    exit;
}

#####
## Now we know that we have a valid token so go ahead
## and let the actions object handle the request
#####

$oAction = new XDrive::Client::Actions
(
    $oToken,
    $oCGI
);

$sFileCurrent = $oAction->FileCurrent();
}

## Check that the current file is OK. If this check fails then
## the code does an XDErrorToBrowser and exists
$oAction->FileCheck($sFileCurrent);

print _header($sFileCurrent);

## Commented out by Justin because it was
## including a \ at the end of the file by printing it out.
#print $oAction->FileLoad($sFileCurrent);
# $oAction->FileLoad($sFileCurrent);

$oDBO->disconnect;
}

sub _header
{
    my $sFile = shift;
    my $mimeType = new HTTP::MimeTypes;

```

```

## Grab the extension and lookup the correct mimetype using the mlt or
mime
## lookup table object.

my $sHeader;      ## MIME header
my $sExtension;   ## file extension

## Clean up the filename by getting rid of any path that comes before
## the filename.
$sFile =~ s=.*/=g;

if (param('mime') eq 'download')
{
    if ($ENV{HTTP_USER_AGENT} =~ /MSIE/)
    {
        $sHeader .= "Content-Disposition: attachment;
filename=$sFile\n";
        $sHeader .= "Content-type: application/download;
name=\"$sFile\"\n\n";
    }
    else
    {
        $sHeader .= "Content-type: application/octet-stream\n\n";
    }
}
else
{
    my $dotPos=-1;
    my $returnPos=-1;
    while (($dotPos = index($sFile,".", $dotPos)) > -1)
    {
        $returnPos = $dotPos;
        $dotPos++;
    }

    ##if no extension set extension to nothing
    if ($returnPos < 0)
    {
        $sExtension='';
    }
    else
    {
        $sExtension = substr($sFile,$returnPos+1);
    }

    $mlt->extension($sExtension);
    $sHeader = $mlt->header();
}

return $sHeader;
}

sub IEHack ()
{
    my $sFileCurrent = param('sFileCurrent');
    my ($sFileOnly) = $sFileCurrent =~ /\//([^\//]+)$/;
    my $sJavascript;
}

```

```

        if (param('source') eq 'www.fileExplorer.view' || param('source') eq
'www.fileExplorer.download')
        {
            $sJavascript = <<EOM;
<SCRIPT LANGUAGE=JAVASCRIPT>
if (parent.parent.parent.name)
{
    parent.parent.parent.XDReset();
    parent.parent.parent.XDRefreshExplorer();
}
</SCRIPT>
EOM
}

        print <<EOM;
Content-type: text/html

<HTML>
<BODY>

$sJavascript

<OBJECT classid=CLSID:4CCF6192-4552-11D3-80A8-0050048D4BF5
    codebase="http://209.101.43.96/dll/xdfiles.cab"
    id=XDFiles>
</OBJECT>

<SCRIPT LANGUAGE="VBSCRIPT">

'Don't raise errors
On Error Resume Next

Dim oXDFiles           ' The ActiveX control

' Late bind to the control
Set oXDFiles = CreateObject("XDFiles.XDFiles.1")

' If we got an error, they didn't install the ActiveX control
If Err.Number <> 0 Then
    MsgBox "You must install the X:drive ActiveX control in order to download
" & _
        "the file. Please click Download again and when prompted to install
the " & _
        "ActiveX control, click Yes."
End If

' Set some test values for the properties
oXDFiles.Prompt = True
oXDFiles.Destination = "c:\$\sFileOnly"
oXDFiles.File = "$sFileCurrent"

' Call each method
oXDFiles.Get

' Print out each property

```

```
' document.write("oXDFfiles.Destination = " & oXDFfiles.Destination & "<br>")
' document.write("oXDFfiles.Prompt = " & CBool(oXDFfiles.Prompt) & "<br>")
' document.write("oXDFfiles.File = " & oXDFfiles.File & "<br>")
' document.write("oXDFfiles.ServerSideToken = " & oXDFfiles.ServerSideToken &
"<br>")
' document.write("oXDFfiles.SessionId = " & oXDFfiles.SessionId & "<br>")

' Free the ActiveX control
Set oXDFfiles = Nothing

</SCRIPT>

</BODY>
</HTML>
EOM
}
```

### **###file\_save.cgi**

```
#!/usr/bin/perl

#####
### file_save.cgi
#####

use strict;
use lib ($ENV{PERL_XDRIVE_LIB});
use CGI::Carp qw(fatalsToBrowser);
use Token;

use XDrive::CGI2;          ## file upload functions
use XDrive::CGI qw(:MAIN);    ## xd_web_buttonindex function
use XDrive::Client::Actions;
use XDrive::Client::Security;
use XDrive::Error;
use XDrive::Library;        ## xd_fatal_error function
use XDrive::Database0;
use XDrive::Database0::Search;
use XDrive::Template;
use XDrive::Database0::Transaction;

&main;

exit;

sub main {
    my $oErr      = new XDrive::Error;
    my $oDBO      = new XDrive::Database0;
    my $oSearch   = new XDrive::Database0::Search;

    my $oTransaction = XDrive::Database0::Transaction->new($oDBO);

    #####
    ## Parse the SST cookie manually and retrieve the user sequence
    ## by passing it to the getUserSeq sub.
    #####
    my ($cookie) = $ENV{'HTTP_COOKIE'} =~ /\bSST=(\w+)\b ;
    my $user_seq = &getUserSeq($oSearch, $cookie);

    my $bytes = $ENV{'CONTENT_LENGTH'}; ## number of bytes being uploaded.

    my %upload_hash = ('USER_SEQ' => $user_seq,
                       'BYTES'      => $bytes);
    my $oCGI = new XDrive::CGI2(\%upload_hash, $oTransaction);

    #####
    ## Attempt to authenticate the user and if the authentication
    ## fails then redirect to the error CGI
    #####
    my $oToken = xd_security_check($oDBO, $oCGI, $oErr);

    if ($oErr->Occurud){
```

```

        xd_fatal_error($oCGI, $oErr);

        exit;
    }

#####
# #####
#### Check to see if they've exceeded
#### their quota limit, and error if so.
#####
# my $oUserQuota = XDrive::DatabaseO::Table::UserQuota->new(undef, $oDBO);
# $oUserQuota->loadWhere("USER_SEQ", $user_seq);
# my $nQuota = $oUserQuota->fetchColumn("QUOTA");
# my $nDiskUsed = $oUserQuota->fetchColumn("DISK_USED");
# if ( ($nQuota * 1024) < ($nDiskUsed + $bytes) ) {
#     $oUserQuota->finish();
#     $oDBO->disconnect();
#     ## let user know he or she has exceeded his quota
#     $oErr->AddErrorByErrorCode(1240);
#     XDErrorToBrowser('action_upload_error.html', $oErr, 1, $oToken);
#     exit(0);
# }
#####
# #####
#####

#####
## Authentication succeeded so we have a valid session, let
## the actions object handle the request
#####
my $oAction = new XDrive::Client::Actions($oToken, $oCGI);

$oAction->SaveUploadedFiles();

#####
## File has been uploaded at this point, so set
## the upload inactive in the database.
#####
$oTransaction->setUploadInactive();

xd_web_buttonindex($oCGI);
$oAction->DisconnectDB();

$oSearch->disconnect();

return 0;
}

#####
#### Subroutine:  getUserSeq
#### Parameters: one object, one scalar
#### Returns:      one scalar
#### Description: Receives a database search object and an SST token.
####                 Queries the token table for the user sequence and returns it.
#####
sub getUserSeq ($$) {
    my $oSearch = shift;

```

```
my $sst_code = shift;  
my $st = "SELECT user_seq FROM token WHERE code = '$sst_code'";  
my $data = $oSearch->XDSQLSearch($st);  
return $$data[0][0];  
}
```

## **#! file\_upload\_stat.cgi**

```
#!/usr/bin/perl

use strict;
use lib ($ENV{PERL_XDRIVE_LIB});

use CGI;
use XDrive::CGI;
use CGI::Carp qw(fatalsToBrowser);
use XDrive::DatabaseO;
use XDrive::DatabaseO::Search;
use XDrive::Error;
use XDrive::Client::Security;
use XDrive::Template;
use XDrive::Library;
use Token;

&main();

exit(0);

sub main {
    my $oCGI = new CGI;
    my $oDBO = new XDrive::DatabaseO;
    my $oErr = new XDrive::Error;

    ######
    ### Security Check
    #####
    my $oToken = xd_security_check($oDBO, $oCGI, $oErr);
    if ($oErr->Occurud || (! $oToken)) {
        XDErrorToBrowser("", "Security Violation: No token", undef, $oToken);
    }

    my ($tmp_file, @stat_array, $stat_bytes, $meta_refresh, $percent,
        $width_green, $width_red);
    my ($url, $tmp_file_string, @tmp_file_array, $error_code);

    my $tmp_path = XDFileUploadTempDir;

    my $oTemplate = new XDrive::Template( {'partner_code' => 'xdrv',
                                           'file'           =>
'mfile_upload_status.thtml'} );

    my $id          = $oCGI->param('id');                      ## unique upload
    my $nof         = $oCGI->param('nof');                     ## number of files
    my $nof_queried = $oCGI->param('nof_queried');           ## nof retrieved
    from db
    my $file_param   = $oCGI->param('tmp_file');             ## initial file
    string
    my $total_file_string = $oCGI->param('total_file_string'); ## string of all
    files
    my $param_uploaded = $oCGI->param('uploaded');           ## bytes uploaded
```

```

my $bytes           = $oCGI->param('bytes');                      ## total number of
bytes

print $oCGI->header();

#####
#### First, if we're passed an upload id and no temp file params (files to
stat),
#### then we either haven't queried the database yet and need to or need to
#### query the database again because the number of files (nof) being uploaded
#### is greater than the number of files that our first database query
returned.
#####

if ($id && (! $file_param)) {
    #### If this is the first pass, then percent will be a space and width will
be 0.
    $percent = $bytes ? int(100 * ($param_uploaded / $bytes)) : ' ';
    $width_green = ($percent eq ' ') ? 0 : $percent;
    $percent .= '%' unless $percent eq ' ';

    my $seconds;

    $width_red = &width_red($width_green);

    $oTemplate->tags( {'width_green' => $width_green,
                        'width_red'   => $width_red,
                        'percent'     => $percent});

    my $oSearch = new XDrive::DatabaseO::Search($oDBO);

    my ($cnt, $data) = $oSearch->uploadStatusSearch($id);

    #### If no rows were returned from the database, then redirect
    #### and re-query the database.
    if ($cnt == 0) {
        $oSearch->disconnect();

        $seconds = 0;

        $url = "/cgi-bin/file_upload_stat.cgi?" .
               "id=$id&nof=$nof&bytes=$bytes&uploaded=$param_uploaded";

        $meta_refresh = &buildMetaRefresh($seconds, $url);

        &connectingToServer($meta_refresh, $oTemplate);

        exit(0);
    }
    else {
        my $i = 0;

        $bytes      = $$data[$i][0];
        $error_code = $$data[$i][2];

        foreach (@$data) {
            $tmp_file = $$data[$i][1];

```

```

    push @tmp_file_array, $tmp_file;

    $i++;
}

$tmp_file_string = join '~', @tmp_file_array;

if ($cnt == $nof) {
    $oSearch->disconnect();

    &statFilesTotal($bytes, $tmp_file_string, $oTemplate);

    exit(0);
}

$seconds = 0;

$url = "/cgi-bin/file_upload_stat.cgi?" .
      "id=$id&nof=$nof&uploaded=$param_uploaded&" .
      "nof_queried=$cnt&bytes=$bytes&tmp_file=$tmp_file_string";

$meta_refresh = &buildMetaRefresh($seconds, $url);

my $bytes_uploaded = ($param_uploaded > 0) ? $param_uploaded : '-';
&redirect($meta_refresh, $bytes_uploaded, $bytes, $oTemplate);

$oSearch->disconnect();

exit(0);
}
}

elsif ($file_param) {
    $oDBO->disconnect();

    my @file_array = split '~', $file_param;
    my $ary_cnt = @file_array;

    my ($uploaded_bytes, $seconds);

    if (scalar @file_array > 0) {
        foreach (@file_array) {
            @stat_array = stat("$tmp_path/$_");
            $stat_bytes = $stat_array[7];

            $uploaded_bytes += $stat_bytes;
            push @tmp_file_array, $_;
        }
        if ( ($uploaded_bytes == $param_uploaded) && ($nof > $nof_queried) ) {
            $seconds = 0;
        }

        $url = "/cgi-bin/file_upload_stat.cgi?" .
              "id=$id&nof=$nof&bytes=$bytes&uploaded=$param_uploaded";
    }

    $meta_refresh = &buildMetaRefresh($seconds, $url);
}

```

```

        $percent = ($bytes == 0) ? 0 : int(100 * ($param_uploaded /
$bytes));
        $width_green = $percent;
        $percent .= '%';

        &redirect($meta_refresh, $uploaded_bytes,
$bytes, $oTemplate, $percent, $width_green);

        exit(0);
    }
    else {
        $tmp_file_string = join '~', @tmp_file_array;
    }
}

$percent = ($bytes == 0) ? 0 : int(100 * ($uploaded_bytes / $bytes));
$width_green = $percent;
$percent .= '%';

$percent = ' ' if $width_green == 0;

$seconds = 2;

$url = "/cgi-bin/file_upload_stat.cgi?" .
"id=$id&bytes=$bytes&nof=$nof&nof_queried=$nof_queried&" .
"uploaded=$uploaded_bytes&tmp_file=$tmp_file_string";

$meta_refresh = &buildMetaRefresh($seconds, $url);

&redirect($meta_refresh, $uploaded_bytes, $bytes, $oTemplate, $percent,
$width_green);

exit(0);
}
elsif ($total_file_string) {
    $oDBO->disconnect();
    &statFilesTotal($bytes, $total_file_string, $oTemplate);
}
else {
    $oDBO->disconnect();

    &closeWindow($oTemplate);

    exit(0);
}
}

sub statFilesTotal ( $$ ) {
    my ($bytes, $tmp_file_string, $oTemplate) = @_;
    my $tmp_path = XDFileUploadTempDir;
    my @file_array = split '~', $tmp_file_string;
    my (@tmp_file_array, $uploaded_bytes, @stat_array, $stat_bytes);
    my $file_cnt = 0;
}

```

```

foreach (@file_array) {
    if (-e "$tmp_path/$_") {
        @stat_array = stat("$tmp_path/$_");
        $stat_bytes = $stat_array[7];

        $uploaded_bytes += $stat_bytes;

        push @tmp_file_array, $_;

        $file_cnt++;
    }
}

if ($file_cnt == 0) {
    &closeWindow($oTemplate);

    exit(0);
}
else {
    my $percent = int(100 * ($uploaded_bytes / $bytes));
    my $width_green = $percent;

    $percent .= '%';

    $percent = ' ' if $width_green == 0;

    my $seconds = 2;

    my $url = "/cgi-bin/file_upload_stat.cgi?" .
               "bytes=$bytes\&total_file_string=$tmp_file_string";

    my $meta_refresh = &buildMetaRefresh($seconds, $url);

    &redirect($meta_refresh, $uploaded_bytes, $bytes, $oTemplate, $percent,
              $width_green);

    exit(0);
}

sub redirect ($$$$$$$) {
    my ($meta_refresh, $bytes_uploaded, $bytes, $oTemplate, $percent,
         $width_green) = @_;

    if ($bytes > 1024) {
        $bytes = sprintf "%.f", ($bytes / 1024);
        $bytes .= 'k';
    }

    if ($bytes_uploaded > 1024) {
        $bytes_uploaded = sprintf "%.f", ($bytes_uploaded / 1024);
        $bytes_uploaded .= 'k';
    }

    my $width_red = &width_red($width_green);
}

```

```

$oTemplate->tags( {'meta_refresh' => $meta_refresh,
                    'bytes_uploaded' => $bytes_uploaded,
                    'bytes_total' => $bytes,
                    'percent' => $percent,
                    'width_green' => $width_green,
                    'width_red' => $width_red} );

$oTemplate->clear();

print $oTemplate->get;
}

sub closeWindow ($) {
    my $oTemplate = $_[0];

    $oTemplate->load('file_upload_stat__window_close.thtml');

    print $oTemplate->get;
}

sub connectingToServer ($$) {
    my ($meta_refresh, $oTemplate) = @_;

    $oTemplate->load('file_upload_connecting.html');

    $oTemplate->tags( {'meta_refresh' => $meta_refresh} );

    print $oTemplate->get;
}

sub buildMetaRefresh ($$) {
    my ($seconds, $url) = @_;

    my $meta_refresh = "<meta http-equiv=refresh content=\"$seconds;
url=$url\">";

    return $meta_refresh;
}

sub width_red {
    my $width_green = shift;
    my $width_red = ((100 - $width_green) > 0)? 100 - $width_green : 0;

    return $width_red;
}

```

### ###folder\_create.cgi

```
#!/usr/bin/perl
# Written by Martin Hald <mhald@uci.edu> on Sat, Jan 30, 1999.

use strict;
use vars qw(@ISA);
use lib ($ENV{PERL_XDRIVE_LIB});
#use lib qw(/export/home/xdrive/lib);

$ENV{'PATH'} = '/bin';
delete @ENV{qw(IFS CDPATH ENV BASH_ENV)};    # Make %ENV safer

@ISA = qw(XDrive::CGI);

use CGI::Carp 'fatalToBrowser';
use Date::Format;
use Token;
use XDrive::CGI qw(:MAIN);
use XDrive::Client::Security;
use XDrive::Client::Actions;

use CGI;
use XDrive::Database0;
use XDrive::Error;

&main;
exit;

sub main
{
    my $oCGI = new CGI;
    my $oDBO = new XDrive::Database0;
    my $oErr = new XDrive::Error;

    #####
    ## Attempt to authenticate the user
    #####
    my $oToken = xd_security_check($oDBO,$oCGI,$oErr);

    #####
    ## If the authentication failed then redirect to the
    ## error cgi and exit
    #####
    if ($oErr->Occurud)
    {
        xd_fatal_error($oCGI,$oErr);
        exit;
    }

    #####
    ## Otherwise we know that we have a valid session and
    ## can continue normally
}
```

```
#####
my $oAction = new XDrive::Client::Actions
(
    $oToken,
    $oCGI
);

$oAction->FolderCreate();
xd_web_buttonindex($oCGI);
$oAction->DisconnectDB();
return 0;
}
```

### **###forgot\_password.cgi**

```
#!/usr/bin/perl

use strict;
use lib ($ENV{PERL_XDRIVE_LIB});

use CGI qw(param header);
use CGI::Carp qw(fatalToBrowser);
use Token;
use XDrive::CGI ();
use XDrive::Template;
use XDrive::Client::Registration;
use XDrive::DatabaseO::Transaction;
use XDrive::DatabaseO::Table::DiskAccount;
use XDrive::DatabaseO::Table::UserData;
use XDrive::DatabaseO::Search;
use XDrive::Library;
use XDrive::Utils::RandomString;

use Mail::Sendmail;

use constant TRUE => (1==1);
use constant FALSE => ! TRUE;

#####
my $request_template = "forgot_password_request.thtml";
my $thank_you_template = "forgot_password_t_y.thtml";
my $alert_template = "forgot_password_alert.thtml";
my $email_template = "password_admin_email.thtml";
#####

exit &main();

sub main {
    my $oCGI = CGI->new();

    my $sEmailAddress = $oCGI->param('txtEmailAddress');
    my $sUsername     = $oCGI->param('txtUsername');

    my $oContent      = new XDrive::Template( {'partner_code' => 'xdrv'} );
    my $oNavigation   = new XDrive::Template( {'partner_code' => 'xdrv'} );
    my $oLayout       = new XDrive::Template( {'partner_code' => 'xdrv'} );

    ## Load the required template HTML files.
    $oNavigation->load("front_nav.thtml");
    $oContent->load("front_signup.thtml");
    $oLayout->load("layout.thtml");

    if ( ($sEmailAddress) && ($sUsername) ) {
        ## Change user's password
        my @characters = ('a'..'z', 'A'..'Z', '0'..'9');
        my $sRandomKey = XDRandomString(8, \@characters);
        if(&PasswordSet($oContent, $sUsername, $sEmailAddress, $sRandomKey)) {
            sendMail($oContent, $sUsername, $sRandomKey, $email_template);
        }
    }
}
```

```

        }
        &display_form($oContent,$thank_you_template);

    } else {
        &display_form($oContent,$request_template);
    }

## Print out the HTML and exit
$oLayout->tags
    ({
        'header_graphic' => 'header_fill.gif',
        'title' => 'What is my password?',
        'content' => $oContent->get,
        'navigation' => $oNavigation->get,
    });
    $oLayout->clear;

    print header,$oLayout->get;
    return 0;
}

sub PasswordSet
{
    my($oContent,$sUsername, $sEmailAddress, $sPassword) = @_;
    my $bReturnValue = 0;
    my $status;
    my $oDiskAccount = XDrive::DatabaseO::Table::DiskAccount->new();
    my $oUser = XDrive::DatabaseO::Table::UserData->new(undef, $oDiskAccount->fetchDBO());

    $oDiskAccount->loadWhere("USERNAME", $sUsername);
    $oUser->loadWhere("SEQ", $oDiskAccount->fetchColumn("USER_SEQ"));

    if ( (defined $oDiskAccount->fetchColumn("USER_SEQ"))
        && ($oUser->fetchColumn("EMAIL_ADDRESS") eq $sEmailAddress)
        )
    {
        my $sPassEncrypted = XDEncrypt($sPassword);
        $oDiskAccount->setColumn("PASSWORD", $sPassEncrypted);
        $oDiskAccount->update();
        $oDiskAccount->commit();
        $bReturnValue = 1;
    } elsif( (defined $oDiskAccount->fetchColumn("USER_SEQ"))
        && ($oUser->fetchColumn("EMAIL_ADDRESS") ne $sEmailAddress)
        )
    {
        &sendMail($oContent,$sUsername, "", $alert_template, " NOT");
    }

    $oDiskAccount->finish();
    $oDiskAccount->disconnect();

    return $bReturnValue;
}

```

```

sub display_form {
    my ($oContent,$template) = @_;
    $oContent->load($template);
}

sub sendMail {
    my ($oContent,$username, $password, $template, $not) = @_;

    my ($name_first, $name_last, $email_address, $data);
    my $oSearch = XDrive::DatabaseO::Search->new(undef);

    $data = $oSearch->XDUserInfoByUsername($username);
    $name_first = $data->[0]->[0];
    $name_last = $data->[0]->[1];
    $email_address = $data->[0]->[2];
    $username = $data->[0]->[3];

    my $message = &get_message($oContent,$name_first, $name_last, $username,
    $password, $template);

    my %toXdrive =
        (
            To      => "$name_first $name_last <$email_address>",
            Bcc     => '',
            From    => "support@xdrive.com",
            Message => $message,
            Subject => "X:drive Password$not Updated!"
        );

    sendmail(%toXdrive);
}

sub get_message {
    my ($oContent,$name_first, $name_last, $username, $password, $template) =
    @_;

    $name_first = ($name_first)? $name_first : "";
    $name_last = ($name_last)? $name_last : "";

    $oContent->load($template);
    $oContent->tags
    ({
        'name_first' => $name_first,
        'name_last' => $name_last,
        'password' => $password,
        'username' => $username,
    });

    return $oContent->get;
}

```

## ###forgot\_username.cgi

```
#!/usr/bin/perl

use strict;
use lib ($ENV{PERL_XDRIVE_LIB});

use CGI qw(header param);
use CGI::Carp qw(fatalsToBrowser);
use Mail::Sendmail;

use Token;
# use XDrive::CGI qw(:MAIN);
use XDrive::Template;
use XDrive::DatabaseO::Search;
use XDrive::Library;
use XDrive::Utils::RandomString;

use constant TRUE => (1==1);
use constant FALSE => ! TRUE;

#####
my $invalid_template = "invalid_email.thtml";
my $request_template = "forgot_username_request.thtml";
my $thank_you_template = "forgot_username_t_y.thtml";
my $email_template = "forgot_username_email.thtml";
#####

exit &main();

sub main {
    my $oCGI = CGI->new();

    my $sEmailAddress = $oCGI->param('txtEmailAddress');
    my ($ar_usernames, $length);

    my $oSearch = XDrive::DatabaseO::Search->new(undefined);

    my $oContent = new XDrive::Template;
    my $oNavigation = new XDrive::Template;
    my $oLayout = new XDrive::Template;

    $oContent->partner('xdrv');
    $oNavigation->partner('xdrv');
    $oLayout->partner('xdrv');

    ## Load the required template HTML files.
    $oNavigation->load("front_nav.thtml");
    $oLayout->load("layout.thtml");

    ## IF a parameter of email address has been processed
    ## and in the correct format, then retrieve usernames
    ## associated with the email and send them.

    if ($sEmailAddress)
```

```

{
## * * * * * * * * * * * * * * * * * * * * * * * * *
## added by kanlaya to check for correct email format
## * * * * * * * * * * * * * * * * * * * * * * * * *

if ($sEmailAddress =~ /.*\@.*\./)
{
    ## Takes the email_address and returns an array_ref
    ## of all the disk_account.usernames accociated
    ## with that users user.email_address
    $ar_usernames = $oSearch->XDUsernameFromEmail($sEmailAddress);
    $length = @$ar_usernames;

    ## IF there are usernames found for this address,
    ## then email the address the list of usernames.
    if($length > 0)
    {
        &sendMail($ar_usernames, $sEmailAddress, $length);
    }

    $oContent->load($thank_you_template);
    $oContent->tags({'emailAddress' => $sEmailAddress, });

    }
else
    { $oContent->load($invalid_template); }
## * * * * * * * * * * * * * * * * * * * * * * * * *
## end add
## * * * * * * * * * * * * * * * * * * * * * * * * *
}
else
    {$oContent->load($request_template);}

## Print out the HTML and exit
$oLayout->tags
    ({
        'header_graphic' => 'header_fill.gif',
        'title' => 'What is my username?',
        'content' => $oContent->get,
        'navigation' => $oNavigation->get,
    });
$oLayout->clear;

print header, $oLayout->get;

return 0;
}

sub sendMail {
    my ($usernames, $email, $length) = @_;
    my $message = &get_message($usernames, $email, $length);
    my %toXdrive =
        (

```

```
To      => "$email",
Bcc     => '',
From   => "support@xdrive.com",
Message => $message,
Subject => "X:drive Username Reminder"
);

sendmail(%toXdrive);
}

sub get_message {
    my ($usernames, $email, $length) = @_;
    my ($sUsername, $sPluralS, $sPluralVerb);
    $sUsername = join("\n", @$usernames);
    $sPluralS = ($length > 1)? "s" : "";
    $sPluralVerb = ($length > 1)? "are" : "is";

    my $oForm = new XDrive::Template;
    $oForm->partner('xdrv');

    $oForm->load($email_template);
    $oForm->tags
    ({
        'sEmailAddress' => $email,
        'sUsername' => $sUsername,
        'sPluralS' => $sPluralS,
        'sPluralVerb' => $sPluralVerb
    });
    $oForm->clear;

    return $oForm->get;
}
```

### **###frame\_generic.cgi**

```
#!/usr/bin/perl
## Written by Matt Clapp on 6/28/99
## This CGI allows us to pass the sst and sid on to the inner frame

use strict;
use lib ($ENV{PERL_XDRIVE_LIB});

use CGI;
use CGI::Carp qw(fatalsToBrowser);
use Token;
use XDrive::Library;
use XDrive::Template;
use XDrive::DatabaseO;
use XDrive::Error;
use XDrive::Client::Security;
use XDrive::CGI qw(XDErrorToBrowser);
use XDrive::CGI::Cookie;

&main;
exit;

sub main
{
    my $oCGI = CGI->new();

    my $oCookie = XDrive::CGI::Cookie->new('x_session_info', $oCGI);
    my $language = $oCookie->getElement('language');
    $language = 'english' unless $language;

    my $sThtmlFile = $oCGI->param('thtml');
    my $sFrameHeight = $oCGI->param('sFrameHeight');

    if ($sFrameHeight == "")
    {
        $sFrameHeight="40";
    }

    if ($sThtmlFile eq 'download_client.thtml')
    {
        my $oTemplate = new XDrive::Template( { 'partner_code' => 'xdrv' } );
        $oTemplate->load($sThtmlFile);
        $oTemplate->tags( { 'sFrameHeight' => $sFrameHeight,
                            'language'      => $language } );
        print "Content-type: text/html\n\n";
        print $oTemplate->get();
    }
    elsif ($sThtmlFile eq 'centerview.thtml')
    {
        my $sFrameSet;
        if ($sFrameHeight > 1)
        {
            $sFrameSet = "$sFrameHeight,*";
        }
    }
}
```

```

else
{
    $sFrameSet = "100%,*";
}

print <<EOM;
Content-type: text/html

<FRAMESET ROWS="$sFrameSet" BORDER=0 FRAMEBORDER=0 MARGINWIDTH=0 MARGINHEIGHT=0
TOPMARGIN=0 LEFTMARGIN=0 frameBorder=0 frameSpacing=0>
EOM

if ($sFrameHeight > 1)
{
    print <<EOM;
    <FRAME NAME='controls' SRC='/explorer/$language/buttons.html'
SCROLLING=NO MARGINWIDTH=0 MARGINHEIGHT=0 TOPMARGIN=0 LEFTMARGIN=0>
EOM
}

print <<EOM;
<FRAME NAME='userData' SRC='/cgi-bin/explorer_user_data.cgi'
SCROLLING=AUTO MARGINWIDTH=0 MARGINHEIGHT=0 TOPMARGIN=0 LEFTMARGIN=0>
</FRAMESET>
EOM
}

else
{
## Security check. Since the thtml file is passed in via the URL
the server
## can be hacked by passing in ../ offsets to get the directory the
hacker
## wants. A cleaner way would be to pass in a number and use that
number
## to access a hash, and die with a security violation if no such
has key
## exists.

my $oDBO = XDrive::Database0->new(undef, undef);
my $oErr = new XDrive::Error;
my $oToken = xd_security_check($oDBO, $oCGI, $oErr);

#####
## If the user failed to autenticate or an error occurred then
## redirect them to the error CGI and exit
#####

if ($oErr->Occurud)
{
    xd_fatal_error($oCGI, $oErr);
    $oDBO->disconnect();
}

warn "#ALERT hacking attempt by ".$oToken->data('user').
      " from ".$ENV{REMOTE_IP};
my $sMessage = $oErr->ReturnMessageGivenCode(341);

```

```
XDErrorToBrowser("", $sMessage, undef, $oToken);  
$oDBO->disconnect();  
exit;  
}  
}
```

### **###get\_a\_shared\_file.cgi**

```
#!/usr/bin/perl

use lib ($ENV{PERL_XDRIVE_LIB});

use CGI;
use CGI::Carp qw(fatalsToBrowser);

use XDrive::CGI;
use XDrive::Template;
use XDrive::DatabaseO::Table::DiskItemShare;
use XDrive::DatabaseO::Table::DiskAccount;
use XDrive::DatabaseO::Table::UserData;
use XDrive::DatabaseO::Table::Reseller;
use XDrive::CGI::Cookie;

use strict;

exit &main();

sub main {
    my $cgi = CGI->new();
    my ($ClaimTicket, $oPage, $xdDBH);

    if ($ENV{'QUERY_STRING'} !~ /=/)
    {
        $ClaimTicket = $ENV{'QUERY_STRING'};
    }
    else
    {
        $ClaimTicket = $cgi->param("claim_ticket");
    }

    if (length($ClaimTicket) < 5)
    {
        $ClaimTicket = $ENV{'PATH_INFO'};
        $ClaimTicket =~ s/^\\///;
    }

    ##make sure that if claim ticket ends in -SP we set language to spanish
    and
    ##truncate claim ticket
    if ($ClaimTicket =~ /-SP$/)
    {
        $ClaimTicket = substr($ClaimTicket,0,length($ClaimTicket)-3);
        my $oCookie = new XDrive::CGI::Cookie('x_session_info', $cgi);
        $oCookie->setElement
            ({
                'language' => 'spanish',
            });

        print "Set-Cookie: ". $oCookie->asString();
    }
}
```

```
my $oDiskItemShare = XDrive::DatabaseO::Table::DiskItemShare->new();
$oDiskItemShare->loadWhere("RANDOM_KEY", $ClaimTicket);

my $diskAcccount = $oDiskItemShare->fetchColumn("DISK_ACCOUNT_USER_SEQ");
$xdDBH = $oDiskItemShare->fetchDBO();

my $oUserAccount = XDrive::DatabaseO::Table::UserData->new(undef, $xdDBH);
$oUserAccount->loadWhere("SEQ", $diskAccount);

my $oReseller = XDrive::DatabaseO::Table::Reseller->new(undef, $xdDBH);
$oReseller->loadWhere("SEQ", $oUserAccount-
>fetchColumn("RESELLER_SEQ"));

my $partner = $oReseller->fetchColumn("CODE");

## If the disk item share was not in the database then just use an xdrive
## look n' feel. NOTE!!!! This should be changed to a plain looking
## error screen.
$partner = 'xdrv' if ! defined $partner;
.

$oPage = new XDrive::Template
  (
    'partner_code' => $partner
  );

$oPage->load('get_a_shared_file_frameset.thtml');
$oPage->tags
  (
    {
      'ClaimTicket' => $ClaimTicket,
      'referee' => $diskAccount,
    }
  );
$oPage->clear();
print $cgi->header, $oPage->get;

$oDiskItemShare->disconnect();
return 0;
}
```

## **###get\_a\_shared\_file\_download.cgi**

```
#!/usr/bin/perl

use lib ($ENV{PERL_XDRIVE_LIB});

use CGI;
use Data::Dumper;
use XDrive::CGI qw(:MAIN);
use XDrive::Client::Actions;
use XDrive::DatabaseO::Search;
use XDrive::DatabaseO::Table::UserData;
use XDrive::DatabaseO::Table::DiskItemShare;
use XDrive::Template;
use XDrive::Error;

use strict;

&main;
exit;

sub main
{
    my ($sFileDescription, $sFileSize, $sRandomKey, $sSeq);

    my $cgi = CGI->new();
    my $oErr = new XDrive::Error;
    my $g_oShared;    ## Shared object
    my $g_oSearch;   ## Shared object
    my $g_oAction;   ## Action object
    my $g_oFileStat; ## File stats
    $sRandomKey = $ENV{'QUERY_STRING'};

    if (!$sRandomKey)
    {
        my $sMessage = $oErr->ReturnMessageGivenCode(1360);
        &display_error($sMessage,$oErr);
    }
    else
    {
        ## Instantiate and load the shared object.
        $g_oShared = XDrive::DatabaseO::Table::DiskItemShare->new(undef,
undef);
        $g_oSearch = XDrive::DatabaseO::Search->new($g_oShared->fetchDBO());

        $g_oShared->loadWhere("RANDOM_KEY", $sRandomKey);
        $sSeq = $g_oShared->fetchColumn("SEQ");

        if(!$sSeq)
        {
            my $sMessage = $oErr->ReturnMessageGivenCode(1361);
            &display_error($sMessage,$oErr);
        }

        ## Call the client action constructor with the shared object
```

```

## which it will use to load all the needed client information.
$g_oAction = new XDrive::Client::Actions($g_oShared,$cgi);

my $sFile = join
(
  '/',
  $g_oShared->fetchColumn("ITEM_PATH"),
  $g_oShared->fetchColumn("ITEM_NAME")
);
$g_oFileStat = $g_oAction->FileStat($sFile);

if (!$g_oFileStat) {
  my $sMessage = $oErr->ReturnMessageGivenCode(1362);
  &display_error($sMessage,$oErr);
} else {
  $sFileDescription = $g_oShared->fetchColumn("DESCRIPTION");
  $sFileSize = ($g_oFileStat->size() > 1024)? int($g_oFileStat-
>size()/1024) . "K" :
  $g_oFileStat->size() . " bytes";

  &display_form($g_oShared-
>fetchColumn("ITEM_NAME"),$sRandomKey, $sFileSize, $sFileDescription,$g_oSearch-
>XDResellerCodeFromUserSeq($g_oShared->fetchColumn("DISK_ACCOUNT_USER_SEQ")));
}

$g_oShared->finish();
$g_oShared->disconnect();
$g_oAction->DisconnectDB();
}

sub display_form
{
  my ($sFilename,$sRandomKey, $sFileSize, $sFileDescription,$sPartner) = @_;
  my $oForm = new XDrive::Template;
  $oForm->partner($sPartner);
  $oForm->load('get_a_shared_file_download_screen.thtml');
  $oForm->tags
  ({
    'sFilename' => $sFilename,
    'sExtraPathInfo' => $sFilename,
    'sRandomKey' => $sRandomKey,
    'sFileSize' => $sFileSize,
    'sFileDescription' => $sFileDescription,
  });
  $oForm->clear();
  print "content-type: text/html\n\n", $oForm->get;
  exit(0);
}

sub display_error
{
  my ($message,$oErr) = @_;
}

```

```
if (!$message)
{
    $message = $oErr->ReturnMessageGivenCode(1363);
}

my $oForm = new XDrive::Template;
$oForm->partner('xdrv');
$oForm->load('get_a_shared_file_error.thtml');
$oForm->tags
({
    'message' => $message,
});
print "content-type: text/html\n\n", $oForm->get;
exit(0);
}
```

### ###login.cgi

```
#!/usr/bin/perl
# Written by Martin Hald <mhalld@geotribe.com> to verify that the user is
# good to login, if they are then log them in and otherwise redirect to
# a not authorized page.

use strict;
use lib ($ENV{PERL_XDRIVE_LIB});
use XDrive::DatabaseO::Table::DiskAccount;
use XDrive::DatabaseO::Table::UserSettings;
use XDrive::DatabaseO::Table::UserQuota;
use XDrive::DatabaseO::Table::Language;
use XDrive::DatabaseO::Search;
use CGI qw(param redirect header cookie);
use CGI;
use XDrive::CGI::Cookie;
use CGI::Carp qw(fatalsToBrowser);

use XDrive::CGI;
use XDrive::Client::Security;
use XDrive::Error;
use XDrive::Template;
use XDrive::Library;
use XDrive::DatabaseO;
use Mail::Sendmail;

&main;
exit;

sub main
{
    my $oCGI      = new CGI;
    my $oErr      = new XDrive::Error;
    ##my $oDBO      = new XDrive::DatabaseO;
    my $oCookie = new XDrive::CGI::Cookie('x_session_info', $oCGI);

    my $oToken;
    my $sToken;
    my $sUsername;
    my $sPartnerCode;
    ## johngaa add for dbexist check
    my $oDBO;

    if (XDDBConnectionCheck() && XDNFSCheck())
    {
        $oDBO = new XDrive::DatabaseO;
    }
    else
    {
        $oDBO = undef;
        print redirect("/upgrading_index.html");
        exit;
    }
    ## end of johngaa change
```

```

my $bSecurity = $oCGI->param('bSecurity');
my $sPartnerToken = $oCGI->param('partner_token');

my $passed_lang = $oCGI->param('language');

#####
## Attempt to authenticate the user by using one of the following two
## authentication methods: username/password pair or partner token
## authentication.
#####
if (! defined $sUsername && length($sPartnerToken) > 20)
{
    authPartnerUser($oCGI,$oErr,$oDBO,\$sUsername,\$oToken,
                    \$sPartnerCode,$sPartnerToken);
    $sToken = $oToken->name();
}
else
{
    authWebSiteUser($oCGI,$oErr,$oDBO,\$sUsername,\$oToken);
    $sPartnerCode = 'xdrv';
}

#####
## If an error occurred while trying to create a token then redirect
## the user to the error page.
#####
if ($oErr->Occurud)
{
    $oDBO->disconnect;
    xd_fatal_error($oCGI,$oErr);
    exit;
}

#####
## If we have gotten here then we have an authenticated user.
#####

#####
## Build and print out cookies
#####
my $sLanguage = getLanguage($oDBO,$sUsername);

##check if user's language is the same as passed language
if ((length($passed_lang) > 0) && $sLanguage ne $passed_lang)
{
    ##update db here to new language
    setLanguage($oDBO,$sUsername,$passed_lang);
    ##update session to new language
    $sLanguage = $passed_lang;
}

##delete the promo cookie; this will not be set here and we
##don't want an old one hanging out
##promo cookies should be set in promo.cgi
$oCookie->deleteElement('promo') if $oCookie->getElement('promo');

```

```

$oCookie->setElement
    ({
        'language' => $sLanguage,
        'partner' => $sPartnerCode,
    });

print "Set-Cookie: ". $oCookie->asString();
print "Set-Cookie: SST=$sToken; domain=.xdrive.com; path=/\n"
    if $sPartnerCode ne 'xdrv';

#####
## write user login to the database
#####
&incrementLoginNumber($oDBO,$sUsername,$sLanguage,$sPartnerCode);

#####
## Send the user off into thier file explorer
#####
if ($ENV{'HTTP_USER_AGENT'} =~ /^xdwin/)
{
    print $oCGI->redirect("?sst=". $oToken->name()."&sid=0");
}
else
{
    xd_web_open($oCGI, "", "", \%ENV, $bSecurity);
}

$oDBO->disconnect;
return 0;
}

sub isYesterday()
{
##
## Date: 01/25/99
## used to check of a date if its today or not
##
    my $last_login = shift;
    my $nSec;                      ## Seconds
    my $nMin;                      ## Minutes
    my $nHour;                     ## Hours
    my $sDay;                       ## Weekday
    my $nDay;                       ## Numeric date (01-31)
    my $nMonth;                    ## Numeric month (01-12)
    my $nYear;                      ## Numeric year (00-99)

    my $todaysDate = ($nSec, $nMin, $nHour, $nDay, $nMonth, $nYear, $sDay) =
(localtime(time))[0,1,2,3,4,5,6];

    $last_login =~ /([\d]+)-([\d]+)-([\d]+)/i;
    my $last_login_year = int($1);
    my $last_login_month = int($2);

```

```

my $last_login_day = int($3);

if ($last_login_year < $nYear)
{
    return 1;
}
if ($last_login_month < $nMonth)
{
    return 1;
}
if ($last_login_day < $nDay)
{
    return 1;
}
return 0;

}

sub incrementLoginNumber()
{
    my $oDBO = shift;
    my $sUsername = shift;
    my $sLanguage = shift;
    my $sPartnerCode = shift;

    my $oDiskAccount = XDrive::Database0::Table::DiskAccount->new(undefined,$oDBO);
    $oDiskAccount->loadWhere("USERNAME", $sUsername);
    $oDiskAccount->finish;
    my $timesLoggedIn = $oDiskAccount->fetchColumn("LOGIN_NUM");
    my $user_seq = $oDiskAccount->fetchColumn("USER_SEQ");

    ## johngaa add
    ## insert a warn in the error log if this is the
    if ($ENV{'HTTP_USER_AGENT'} =~ /xdwin/)
    {
        my $todaysDate = XDToday();
        warn "#client_login user_seq=$user_seq username=$sUsername
date=$todaysDate#";
    }
    ## end of johngaa warn of first entry

    if ($timesLoggedIn)
    {
        $timesLoggedIn++;
    }
    else
    {
        $timesLoggedIn=1;
    }

    $oDiskAccount->setColumn("LOGIN_NUM", $timesLoggedIn);
    $oDiskAccount->setColumn("LAST_LOGIN", XDToday());
}

```

```

my $status = $cDiskAccount->update();

if ($status > -1)
{
    $oDiskAccount->commit();
    $oDiskAccount->finish();

    ## johngaa modify to exclude college club
    ## and quepasa users out of the extra space
    ## promo

    my $oUserData = XDrive::DatabaseO::Table::UserData-
>new(undefined,$oDBO);
    $oUserData->loadWhere("SEQ", $user_seq);
    my $reseller_seq = $oUserData-
>fetchColumn("RESELLER_SEQ");
    if (!(isResellerSeqCC_QUPA($oDBO,$reseller_seq)))
    {
        ##give user extra 10MB if 10th login
        if ($timesLoggedIn == 10)
        {
            my $oUserQuota = XDrive::DatabaseO::Table::UserQuota-
>new(undefined,$oDBO);
            $oUserQuota->loadWhere("USER_SEQ", $user_seq);
            my $additional_quota = $oUserQuota-
>incrementQuota($user_seq,10240);
            if ($additional_quota > 0)
            {
                &send_email($user_seq, $oDBO,
$additional_quota,$sLanguage, $sPartnerCode);
            }
        }
    }
    else
    {
        # $oDiskAccount->rollback();
    }
}

sub isResellerSeqCC_QUPA
{
    my $oDBO = shift;
    my $reseller_seq = shift;
    my $dbh = $oDBO->fetchDBH();

    my $sql_stmt = "SELECT code FROM reseller WHERE seq=?";
    my $cmd;
    my @data;

    $cmd = $dbh->prepare($sql_stmt);
    $cmd->execute((($reseller_seq)));
    @data = $cmd->fetchrow_array;
    if ($data[0] eq 'cc' || $data[0] eq 'qupa')
    {
}

```

```

        return 1;
        ##print "should return a true\n"
    }
    return 0;
}

sub send_email
{
    my $user_seq = shift;
    my $oDBO = shift;
    my $additional_quota = shift;
    my $sLanguage = shift;
    my $sPartnerCode = shift;

    if ($sPartnerCode eq 'cc')
    {
        return;
    }

    ##comes in as k, change to megabytes
    my $mbs = $additional_quota/1024;

    my $oUserData = XDrive::DatabaseO::Table::UserData->new(undef,$oDBO);
    $oUserData->loadWhere("SEQ", $user_seq);
    my $email_address = $oUserData->fetchColumn("EMAIL_ADDRESS");
    my $name_first = $oUserData->fetchColumn("NAME_FIRST");
    my $name_last = $oUserData->fetchColumn("NAME_LAST");

    my $oTemplate = new XDrive::Template
    ({
        'language'      => $sLanguage,
        'partner_code' => $sPartnerCode,
    });

    $oTemplate->load('received_10MB_10logins.thtml');
    $oTemplate->tags({
        'mbs' => $mbs,
    });
    $oTemplate->clear();
    my $message = $oTemplate->get;

    my %toXdrive =
    (
        To      => "$name_first $name_last <$email_address>",
        Bcc    => '',
        From   => "support@xdrive.com",
        Message => $message,
        Subject => "Congratulations!"
    );

    sendmail(%toXdrive);
}

sub authPartnerUser
{

```

```

my $oCGI = shift;
my $oErr = shift;
my $oDBO = shift;
my $rsUsername = shift;
my $roToken = shift;
my $rsPartnerCode = shift;
my $sPartnerToken = shift;

my $oCookie = new XDrive::CGI::Cookie('x_session_infc', $oCGI);

my $oPartnerToken = new Token
  ({
    'err' => $oErr,
    'dbh' => $oDBO,
  });
$oPartnerToken->load($sPartnerToken);

return if $oErr->Occurud;

$$roToken = new Token
  ({
    'dbh' => $oDBO,
    'err' => $oErr,
    'user_sequence' => $oPartnerToken->data('user_seq'),
  });
$$roToken->create();

return if $oErr->Occurud;

### Edited by Justin so that the partner_code is looked for
### in the cookie instead of the token table.
### And then again because I shouldn't have done that. The
### partner code hasn't been set in the cookie by this point,
### so we shouldn't be looking in there for it.
$rsPartnerCode = $oPartnerToken->data('partner_code');
# $$rsPartnerCode = $oCookie->getElement('partner');
$rsUsername = $oPartnerToken->data('user');

$$roToken->data('ip', $ENV{REMOTE_ADDR});
$$roToken->data('browser', $ENV{HTTP_USER_AGENT});
$$roToken->data('user', $rsUsername);
$$roToken->data('user_seq', $oPartnerToken->data('user_seq'));
$$roToken->data('partner_code', $rsPartnerCode);
$$roToken->data('disk_account_seq', $oPartnerToken-
>data('disk_account_seq'));
$$roToken->save;

$oPartnerToken->delete();
}

sub authWebSiteUser
{
  my $oCGI = shift;
  my $oErr = shift;
  my $oDBO = shift;
  my $rsUsername = shift;
  my $roToken = shift;
}

```

```

my $sPassword = $oCGI->param('pass');
$$rsUsername = $oCGI->param('user');

if (xd_auth_password($$rsUsername,$sPassword,$oDBO))
{
    ## Login the user info X:drive and get the session token
    $$roToken = xd_login($oCGI, $$rsUsername, $oErr, $oDBO);
}
else
{
    $oErr->AddErrorByErrorCode('501');
}
}

sub getLanguage
{
    my $oDBO = shift;
    my $sUsername = shift;

    my $language;

    ## get the user's language out of the database
    my $oDiskAccount = XDrive::DatabaseO::Table::DiskAccount-
>new(undefined,$oDBO);
    $oDiskAccount->loadWhere("USERNAME", $sUsername);
    $oDiskAccount->finish;
    my $userSeq = $oDiskAccount->fetchColumn("USER_SEQ");

    my $oUserSettings = XDrive::DatabaseO::Table::UserSettings-
>new(undefined,$oDBO);
    $oUserSettings->loadWhere("USER_SEQ",$userSeq);
    $oUserSettings->finish;
    my $language = $oUserSettings->fetchColumn("LANGUAGE");

    if ($language eq '')
    {
        $language = 'english';
    }
    else
    {
        ## Get language from database given code
        my $oLanguage = XDrive::DatabaseO::Table::Language-
>new(undefined,$oDBO);
        $oLanguage->loadWhere("SEQ",$language);
        $oLanguage->finish;
        $language = $oLanguage->fetchColumn("CODE");
    }

    return $language;
}

sub setLanguage
{
    ##set the LANGUAGE column of the User_Settings table to passed language
}

```

```

my $oDBO = shift;
my $sUsername = shift;
my $language = shift;

my ($rv,$errorCode);

## get the user's language out of the database
my $oDiskAccount = XDrive::DatabaseO::Table::DiskAccount->new(undef,$oDBO);
    ##grab right table
    $oDiskAccount->loadWhere("USERNAME", $sUsername);
    $oDiskAccount->finish;
    my $userSeq = $oDiskAccount->fetchColumn("USER_SEQ");

my $oUserSettings = XDrive::DatabaseO::Table::UserSettings->new(undef,$oDBO);
    $oUserSettings->loadWhere("USER_SEQ",$userSeq);
    $oUserSettings->finish;

##grab the seq number of the LANGUAGE being passed
my $oLanguage = XDrive::DatabaseO::Table::Language->new(undef,$oDBO);
    $oLanguage->loadWhere("CODE",$language);
    $oLanguage->finish();
    my $seq_lang = $oLanguage->fetchColumn("SEQ");

eval
{
    ##
    ##set language here
    $rv = 0;
    $oUserSettings->setColumn('LANGUAGE',$seq_lang);
    $rv = $oUserSettings->update();
};

if ($rv == 0)
{
    $oUserSettings->rcllback();
    $errorCode = 0;
}
else
{
    $oUserSettings->commit();
    $errorCode = 1;
}

return $errorCode;
}

```

### **###logout.cgi**

```
#!/usr/bin/perl
## Program to log the user out, currently hacked to redirect to the homepage.
## Modified by Justin on 10/15/99 to be Security.pm friendly
## and get rid of the XDrive::CGI stuff.

use strict;
use lib ($ENV{PERL_XDRIVE_LIB});

use CGI;
use CGI::Carp qw(fatalsToBrowser);
use XDrive::Client::Security;
use XDrive::DatabaseO;
use XDrive::Error;

&main;
exit;

sub main
{
    my $oCGI    = CGI->new();
    my $oDBO    = new XDrive::DatabaseO;
    my $oError  = new XDrive::Error;

    ##removes token from the database
    xd_logout($oDBO, $oCGI, $oError);

    $oDBO->disconnect;

    print $oCGI->redirect('/');
    return 0;
}
```

### ###navbar.cgi

```
#!/usr/bin/perl
## Written by Martin Hald <martin@xdrive.com> on Sun Sep 5 1999
## Script to dynamically show the correct template based on which
## partner is looking at the web site.

use strict;
use lib ($ENV{PERL_XDRIVE_LIB});

use CGI;
use XDrive::Library;
use XDrive::Template;
use XDrive::Error;
use XDrive::DatabaseO;
use XDrive::Client::Security;

&main;
exit;

sub main
{
    ## Load the session token
    my $oErr      = new XDrive::Error;
    my $oDBO      = new XDrive::DatabaseO;
    my $oCGI      = new CGI;
    my $oCookie   = new XDrive::CGI::Cookie('x_session_info', $oCGI);

    #####
    ## Attempt to autenticate the user
    #####
    my $oToken = xd_security_check($oDBO,$oCGI,$oErr);

    #####
    ## If the user does not validate or an error occurud
    ## then redirect to the error CGI and exit
    #####
    if ($oErr->Occurud)
    {
        xd_fatal_error($oCGI,$oErr);

        $oDBO->disconnect();

        exit;
    }

    #####
    ## Otherwise we have validated and should load the navbar
    ## associated with the partner
    #####
    ### Edited by Justin so that partner_code is looked for in
    ### the cookie instead of the token table.
    # my $oForm = new XDrive::Template
```

```
#      ({
#        'partner_code' => $oToken->data('partner_code')
#      });

my $oForm = new XDrive::Template
  ({
    'partner_code' => $oCookie->getElement('partner')
  });

$oForm->load('navbar.thtml');

#####
## Print the navbar and stop
#####

print "Content-type: text/html\n\n";
print $oForm->get;

$oDBO->disconnect();

return 0;
}
```

### ###password\_change.cgi

```
#!/usr/bin/perl
## Written by Lucas McGregor on ???

use strict;
use lib ($ENV{PERL_XDRIVE_LIB});

use CGI qw(header param);
use CGI::Carp qw(fatalsToBrowser);

use Token;
use XDrive::Database0;
use XDrive::Error;
use XDrive::CGI qw(:MAIN);
use XDrive::Client::Security;
use XDrive::Client::Registration;
use XDrive::Database0::Transaction;
use XDrive::Database0::Table::DiskAccount;
use XDrive::Library;
use XDrive::Template;

use constant TRUE => (1==1);
use constant FALSE => ! TRUE;

&main;
exit;

sub main
{
    my $oCGI    = CGI->new();
    my $oDBO    = new XDrive::Database0;
    my $oErr = new XDrive::Error;

#####
## Attempt to autenticate the user
#####

    my $oToken = xd_security_check($oDBO, $oCGI, $oErr);

#####
## If an error occurs or the user fails to autenticate then redirect
## to the error CGI and exit
#####

    if ($oErr->Occurud)
    {
        xd_fatal_error($oCGI,$oErr);
        exit;
    }

#####
## Otherwise have have autenticated the user and can proceed
#####
}
```

```

my $sUsername = $oToken->data('user');

my $sPasswordNew      = $oCGI->param('txtPasswordNew1');
my $sPasswordNewConfirm = $oCGI->param('txtPasswordNew2');
my $sPasswordOld      = $oCGI->param('txtPasswordOld1');

if (($sPasswordNew eq '') || ($sPasswordNewConfirm eq '') || ($sPasswordOld eq ''))
{
    ##if any of the fields is blank, give em error message
    my $sMessage = $oErr->ReturnMessageGivenCode(1340);
    XDErrorToBrowser("", $sMessage, undef, $oToken);
}

## Change user's password
PasswordSet($sUsername, $sPasswordNew, $sPasswordOld, $oToken, $oErr, $oCGI);

return 0;
}

#####
## PasswordSet: Change user's password
#####

sub PasswordSet($$)
{
    my $sUsername = shift;          ## (I) User in question
    my $sPassword = shift;          ## (I) New password
    my $sPasswordOld = shift;       ## (I) Old password
    my $oToken = shift;             ## (I) Token object
    my $oErr = shift;
    my $oCGI = shift;
    my $sPassEncrypted = XDEncrypt($sPassword);

    my $oDiskAccount = XDrive::DatabaseO::Table::DiskAccount->new();
    $oDiskAccount->loadWhere("USERNAME", $sUsername);

    if (! PasswordsMatch($oDiskAccount->fetchColumn("PASSWORD"), $sPasswordOld))
    {
        my $sMessage = $oErr->ReturnMessageGivenCode(1341);
        XDErrorToBrowser("", $sMessage, undef, $oToken);
    }

    if (! defined $oDiskAccount->fetchColumn("USER_SEQ"))
    {
        my $sMessage = $oErr->ReturnMessageGivenCode(1342);
        XDErrorToBrowser("", $sMessage, undef, $oToken);
    }

    $oDiskAccount->setColumn("PASSWORD", $sPassEncrypted);
    my $status = $oDiskAccount->update();

    ## If no error, then commit
    ## Else rollback and show an error
    if ($status > -1) {
        $oDiskAccount->commit();
    }
}

```

```

}

else
{
    $oDiskAccount->rollback();
    my $sMessage = $oErr->ReturnMessageGivenCode(1343);
    XDErrorToBrowser("", $sMessage, undef, $oToken);
}

$oDiskAccount->finish();
$oDiskAccount->disconnect();

my $oTemplate = new XDrive::Template( {'partner_code' => 'xdrv'} );
    $oTemplate->load('password_changed.thtml');
    print $oCGI->header(), $oTemplate->get;
}

#####
## PasswordsMatch: Check an encrypted password against an unencrypted
## password and return true or false.
#####

sub PasswordsMatch
{
    my $sEncrypted = shift;  ## current password
    my $sToCheck   = shift;  ## string to check

    ## Encrypt the passed password with the salt from the password taken
    ## from the database.
    my ($sSalt) = $sEncrypted =~ /(\w{2})/;

    ## Do the passwords match? If so then return true, otherwise false.
    if ($sEncrypted eq crypt($sToCheck, $sSalt))
    {
        return TRUE;
    }

    return FALSE;
}

```

### ###promo.cgi

```
#!/usr/bin/perl
##
## File: promo.cgi
##
## Written by Justin White on 10/25/99.
## Sets a promo cookie and redirects to the home page.

use strict;
use lib ($ENV{PERL_XDRIVE_LIB});

use XDrive::Template;
use XDrive::DatabaseO;
use XDrive::CGI::Cookie;
use XDrive::DatabaseO::Search;

use CGI;
use CGI::Carp qw(fatalsToBrowser);

&main();

exit;

sub main {
    my ($cookie, $promo, %new_info, $oSearch, $oTemplate);

    my $oCGI      = CGI->new();
    my $oCookie = XDrive::CGI::Cookie->new('x_session_info', $oCGI);

    my $path_info = $ENV{'PATH_INFO'};

    my $sClaimTicket = $oCGI->param('ct');

    if ($sClaimTicket) {
        ##
        # Via cookie, set the promo so that signup_account.cgi treats
        # it as a promo and set the claim ticket code so that we can
        # remove that data from the batch_user_data table.
        ##
        $oCookie->setElement( {'ct' => $sClaimTicket} );
    }

    if ($path_info) {
        $path_info =~ s/^\\///;

        $oCookie->setElement( {'promo' => $path_info} );
        $oCookie->setPath('/');
    }

    ##if user is coming from the befree promo, set a cookie with their
    ##source id, be Free requires this for tracking purposes
    if ($path_info =~ /befree/)
    {
        my $sourceid = $oCGI->param('sourceid');
        print "Set-Cookie: sourceid=$sourceid; domain=.xdrive.com; path=/\n";
    }
}
```

```

}

my $oDBO      = XDrive::Database0->new();
my $oSearch   = XDrive::Database0::Search->new($oDBO);

my @bind_array = ($path_info);

# my $st = "SELECT p.template, p.redirect_url, dl.code
#           FROM xdrive.promo p, xdrive.v_language dl
#          WHERE p.uri = '$path_info'
#            AND p.du_language = dl.seq(+)";

my $st = "SELECT p.template, p.redirect_url, dl.code
          FROM xdrive.promo p, xdrive.v_language dl
         WHERE p.uri = ?
           AND p.du_language = dl.seq(+)";

# my $data = $oSearch->XDSQLSearch($st);
my $data = $oSearch->XDSQLSearch($st, \@bind_array);
my $rows = @{$data};

if ($rows > 0) {
    my $template      = $$data[0][0];
    my $redirect_url = $$data[0][1];
    my $language      = $$data[0][3];

    $oCookie->setElement( {'language' => $language} );

    print "Set-Cookie: ", $oCookie->asString();

    if ($template) {
        eval {
            $oTemplate = new XDrive::Template( {'cookie'      => $oCookie,
                                                'partner_code' => 'xdrv'} );
            $oTemplate->partner('xdrv');

            $oTemplate->load("promo/$template");
        };

        if ($@) {
            print $oCGI->redirect('/');
            warn "$@\n";
        }
        else {
            print $oCGI->header(), $oTemplate->get;
        }
    }

    $oSearch->disconnect;

}
elsif ($redirect_url) {
    print $oCGI->redirect($redirect_url);

    $oSearch->disconnect;
}
else {
    print $oCGI->redirect('/');
}

```

```
    $oSearch->disconnect;
}
}
else {
    print $oCGI->redirect('/');
}
else {
    print $oCGI->redirect('/');
    $oSearch->disconnect;
}
return;
}
```

## ###removespace.cgi

```
#!/usr/bin/perl
#####
## Written by Karen Eppinger
## removespace.cgi - cancels additional space requests
#####

use lib ($ENV{PERL_XDRIVE_LIB});

use XDrive::Error;
use XDrive::Library;
use XDrive::DatabaseO;
use XDrive::DatabaseO::Table::Reseller;
use XDrive::DatabaseO::Table::Deal;
use XDrive::DatabaseO::Table::Item;
use XDrive::DatabaseO::Table::DiskAccount;
use XDrive::DatabaseO::Table::UserData;
use XDrive::DatabaseO::Table::UserPurchase;
use XDrive::Client::Actions;
use XDrive::DatabaseO::Search;
use XDrive::Sale::Purchase;
use Mail::Sendmail;
use CGI::Carp qw(fatalsToBrowser);
use CGI;
use XDrive::Template;
use XDrive::CGI qw(:MAIN);
use XDrive::Client::Security;
use EpochClient_ssl;

use strict;

$ENV{'PATH'} = '/bin';
delete @ENV{qw(IFS CDPATH ENV BASH_ENV)};    # Make %ENV safer

exit &main;

#####
## main: main function calls all others
##
## 
#####

sub main
{
    my $oCGI = CGI->new();
    my $oDBO = new XDrive::DatabaseO;
    my $oErr = new XDrive::Error;

    #####
    ## Attempt to authenticate the user
    ####

    my $oToken = xd_security_check($oDBO, $oCGI, $oErr);
```

```

#####
## If an error occurs during authentication or authentication fails
## then redirect to the error CGI and exit
#####

if ($oErr->Occurud)
{
    xd_fatal_error($oCGI,$oErr);
    exit;
}

#####
## Otherwise we have a valid session
#####

my $sUserName = $oToken->data('user');
my $oTemplate = new XDrive::Template
(
    'partner_code' => $oToken->data('partner_code')
);

## used to figure whether to give user the form or process the form
my $sAction = $oCGI->param("action");

## Create a DBH
my $oDBH = XDrive::Database0->new();

## if the action is a request type
if ($sAction eq 'process')
{
    ##else we process the form input
    &CheckSpaceUsed($oCGI,$sUserName,$oTemplate,$oToken,$oDBH,$oErr);
}
elsif ($sAction eq 'intro')
{
    &ShowIntroPage($oTemplate,$sUserName,$oToken,$oCGI);
}
else
{
    ## we give the user the form
    &ShowSpace($sUserName,$oTemplate,$oToken,$oDBH,$oErr);
}
$oDBH->disconnect();
}

#####
## CheckSpaceUsed: make sure the user has enough free space for his files
## if not, do not let him cancel
#####

sub CheckSpaceUsed
{
    my $oCGI = shift;
    my $sUserName = shift;
    my $oTemplate = shift;
}

```

```

my $oToken = shift;
my $oDBH = shift;
my $oErr = shift;

##we need to get the number of fields so we know what to process
my @fields = $oCGI->param;
my $checked = 0;

my $returnValue = '';
##for each checked item, either cancel or tell user they may not cancel
##because space used is larger than space available after cancelation

for (my $i=0; $i<$#fields; $i++)
{
    if ($fields[$i] =~ /tc_/)
    {
        $fields[$i] =~ s/^tc_//;
        my $oPurchase = new XDrive::Sale::Purchase($oDBH);
        my @message_dbmessage = $oPurchase->CancelItem($fields[$i],
$sUserName);
        $returnValue .= $message_dbmessage[0];
        $checked++;

        if ($message_dbmessage[1] != 0)
        {
            $oDBH->commit();
        }
        else
        {
            $oDBH->rollback();
        }
    }
}

if ($checked>0)
{
    ##show the page that tells user if space was cancelled or not
    &ShowCanceled($returnValue,$oTemplate);
}
else
{
    ##user hasn't checked anything, give em error page
    my $sError = $oErr->ReturnMessageGivenCode(1301);
    XDErrorToBrowser("", $sError, undef, $oToken);
}
}

#####
## ShowCanceled: tell user space was cancelled
#####

sub ShowCanceled
{
    my $sItemsCancelled = shift;
    my $oTemplate      = shift;
}

```

```

## Load the required template HTML files.
$oTemplate->load('removespace_ok.thtml');
$oTemplate->tags
  ({
    'items' => $sItemsCanceled
  });
print "Content-type: text/html\n\n";
print $oTemplate->get();
}

#####
## ShowSpace: shows the user the initial page with their current space
## allocation
#####

sub ShowSpace
{
  my $sUserName = shift;
  my $oTemplate = shift;
  my $oToken = shift;
  my $oDBH = shift;
  my $oErr = shift;

  my $sMessage = $oErr->ReturnMessageGivenCode(1302);
  $sMessage = &GetItems($sUserName,$oToken,$oDBH,$oErr);

  ## Load the required template HTML files.
  $oTemplate->load('removespace_request.thtml');
  $oTemplate->tags
  ({
    'items' => $sMessage
  });

  print "Content-type: text/html\n\n";
  print $oTemplate->get();
}

sub ShowIntroPage
{
  my $oTemplate = shift;
  my $sUserName = shift;
  my $oToken = shift;
  my $oCGI = shift;

  my $oAction = new XDrive::Client::Actions
  (
    $oToken,
    $oCGI
  );
  my $quotaUsed = $oAction->QuotaUsed();
  $quotaUsed = sprintf("%2.2f",$quotaUsed/1024);
  my $quotaLimit = $oAction->QuotaLimit();
  $quotaLimit = sprintf("%2.2f",$quotaLimit/1024);

  $oTemplate->load('removespace_intro.thtml');
  $oTemplate->tags
}

```

```

    ({
        'quotaUsed' => $quotaUsed,
        'quotaLimit' => $quotaLimit
    });
$oTemplate->clear();

print "Content-type: text/html\n\n";
print $oTemplate->get();
}

sub GetItems
{
    my $sUserName = shift;
    my $oToken = shift;
    my $oDBH = shift;
    my $oErr = shift;

    my $oDiskAccount = XDrive:::DatabaseO::Table:::DiskAccount-
>new(undefined,$oDBH);
    $oDiskAccount->loadWhere('USERNAME', $sUserName);

    ##now load all items in the user_purchase database that are
    ##owned by this user
    my $userSeq = $oDiskAccount->fetchColumn('USER_SEQ');

    ##passing a 0 as the last parameter returns all non-canceled items
    my $oSearch = XDrive:::DatabaseO::Search->new(undefined);
    my $array = $oSearch->XDUserPurchases($userSeq,0);

    ##see if the array returned any items

    if ($array->[0][0] eq '')
    {
        my $sError = $oErr->ReturnMessageGivenCode(1302);
        XDErrorToBrowser('removespace_noitems.shtml', $sError, 1, $oToken);
    }

    my $i;
    my $items = '';

    for $i(0..$#$array)
    {
        ##storing the complete string returned by Epoch
        ##must take only stuff after the | to cancel transaction
        ##and chop off last character which seems to be a line return
        ##may have to alter this if we see problems
        chop($array->[$i][4]);
        my @aCodes=split(/\|/, $array->[$i][4]);
        my $itemName = 'tc_' . $aCodes[1];
        $itemName=~s/~/~/;

        ##Get the name associated with this item
        my $oDeal = XDrive:::DatabaseO::Table:::Deal->new(undefined,$oDBH);
        $oDeal->loadWhere('SEQ',$array->[$i][2]);
        my $itemSeq = $oDeal->fetchColumn('ITEM_SEQ');
        my $oItem = XDrive:::DatabaseO::Table:::Item->new(undefined,$oDBH);
        $oItem->loadWhere('SEQ', $itemSeq);
    }
}

```

```
my $description = $oItem->fetchColumn('DESCRIPTION');

$items .= '<input type="checkbox" name="' . $itemName . '">' .
getDescription . '<BR>';
}

if ($items eq '')
{
    my $sError = $oErr->ReturnMessageGivenCode(1302);
    XDErrorToBrowser('removespace_noitems.thtml', $sError, 1, $oToken);
}

return $items;
}
```

## **###selected\_delete.cgi**

```
#!/usr/bin/perl
# Written by Martin Hald <mhald@geotribe.com> for renaming files from the
# web.

use strict;
use lib ($ENV{PERL_XDRIVE_LIB});

use CGI;
use CGI::Carp qw(fatalsToBrowser);
use XDrive::CGI qw(:MAIN);
use XDrive::Client::Actions;
use XDrive::Client::Security;

use XDrive::Error;
use XDrive::DatabaseO;

exit &main;

sub main
{
    my $oCGI = new CGI;
    my $oErr = new XDrive::Error;
    my $oDBO = new XDrive::DatabaseO;

    #####
    ## Attempt to autenticate the user
    #####
    my $oToken = xd_security_check($oDBO,$oCGI,$oErr);

    #####
    ## If an error occurred or the user could not be validated then
    ## redirect to the error CGI and exit
    #####
    if ($oErr->Occurud)
    {
        xd_fatal_error($oCGI,$oErr);
        exit;
    }

    #####
    ## Otherwise we know that we have a valid session
    #####
    my $oAction = new XDrive::Client::Actions
    (
        $oToken,
        $oCGI
    );

    $oAction->FileCheck($oAction->ItemCurrent());
    $oAction->ItemDelete($oAction->ItemCurrent());
```

```
xd_web_buttonindex($oCGI);
$oAction->DisconnectDB();

return 0;
}
```

### **###selected\_rename.cgi**

```
#!/usr/bin/perl
# Written by Martin Hald <mhald@geotribe.com> for renaming files from the
# web.

use strict;
use lib ($ENV{PERL_XDRIVE_LIB});

use CGI;
use CGI::Carp 'fatalToBrowser';
use XDrive::CGI qw(:MAIN);
use XDrive::Client::Actions;
use XDrive::Client::Security;

use XDrive::Library;
use XDrive::Database0;
use XDrive::Error;

## Clean up the path
$ENV{'PATH'} = '/bin';
delete @ENV{qw(IFS CDPATH ENV BASH_ENV)};      # Make %ENV safer

exit &main;

sub main {
    my $oCGI = new CGI;
    my $oErr = new XDrive::Error;
    my $oDBO = new XDrive::Database0;

    #####
    ## Attempt to autenticate the user
    #####
    my $oToken = xd_security_check($oDBO,$oCGI,$oErr);

    #####
    ## If the autentication fails or there is an error during the
    ## autentication phase then redirect to the error CGI
    #####
    if ($oErr->Occurud)
    {
        xd_fatal_error($oCGI,$oErr);
        exit;
    }

    #####
    ## Otherwise we have a valid session
    #####
    my $oAction = new XDrive::Client::Actions
    (
        $oToken,
        $oCGI
    )
}
```

```
    );

my $sItemOld = $oAction->ItemCurrent();

## Get the relative path to the item to be renamed from the
## old item name itself.
my ($sFolder) = $sItemOld =~ /(.*?)[^\\]+/;

## Set the new item to be in that folder.
my $sItemNew = $sFolder.$oAction->ItemNew().$oAction->ItemExtension();

$oAction->FileCheck($sItemOld);
$oAction->ItemRename($sItemOld,$sItemNew);

xd_web_buttonindex($oCGI);
$oAction->DisconnectDB();
}


```

### **###settings\_save.cgi**

```
#!/usr/bin/perl

use strict;
use vars qw(@ISA);
use lib ($ENV{PERL_XDRIVE_LIB});

use CGI;
use CGI::Carp qw(fatalsToBrowser);
use Data::Dumper;
use XDrive::Library;
use XDrive::CGI;
use XDrive::Client::Quota;
use XDrive::Client::Security;
use XDrive::CGI::Cookie;
use XDrive::DatabaseO::Table::UserSettings;
use XDrive::DatabaseO::Table::Language;
use XDrive::DatabaseO;
use XDrive::Error;
use XDrive::Template;

@ISA = qw(XDrive::CGI);

exit &main;

sub main {
    my $oCGI = CGI->new();
    my $oDBO = new XDrive::DatabaseO;
    my $oErr = new XDrive::Error;

    #####
    ## Attempt to autenticate the user
    #####

    my $oToken = xd_security_check($oDBO,$oCGI,$oErr);

    #####
    ## If the autentication fails or there is an error during the
    ## autentication phase then redirect to the error CGI
    #####
    if ($oErr->Occurud)
    {
        xd_fatal_error($oCGI,$oErr);
        exit;
    }

    #####
    ## Otherwise we have a valid session
    #####
    my $oCookie = XDrive::CGI::Cookie->new('x_session_info', $oCGI);
    my $sUser = $oToken->data('user');
    my $nUser = UserIdGet($sUser);
```

```

my $oUserSettings = XDrive::DatabaseO::Table::UserSettings->new(undef,
undef);

## Initialize global variables
my $g_bFileExtEdit = $oCGI->param('bFileExtEdit') eq 'on' ? 1 : 0;
my $g_bExtraHelp   = $oCGI->param('bExtraHelp') eq 'on' ? 1 : 0;
my $g_bMarketing  = $oCGI->param('bMarketing') eq 'on' ? 1 : 0;
my $g_bNewsletter = $oCGI->param('bNewsletter') eq 'on' ? 1 : 0;
my $g_bLanguage    = $oCGI->param('bLanguage');
my $sCurrentLanguage;

my $languageCode;

if (defined $g_bLanguage)
{
    my $oLanguage = XDrive::DatabaseO::Table::Language->new
        (undef, $oUserSettings->fetchDBO());
    $oLanguage->loadWhere("CODE", $g_bLanguage);
    $languageCode = $oLanguage->fetchColumn("SEQ");
}

## We are doing this in a backwards way -- first we will try and load the
## current users profile. If that works then we change it and update it
## by calling save. If that does not work then we just call save.

$oUserSettings->loadWhere("USER_SEQ", $nUser);
$oUserSettings->setColumn("FILE_EXT_EDITABLE", $g_bFileExtEdit);
$oUserSettings->setColumn("EXTRA_HELP", $g_bExtraHelp);
$oUserSettings->setColumn("OPT_MARKETING", $g_bMarketing);
$oUserSettings->setColumn("OPT_NEWSLETTER", $g_bNewsletter);

## The language element is an OPTIONAL setting in the "My Profile" area.
## If it is passed then set it, otherwise leave the current value.
if (defined $g_bLanguage)
{
    $sCurrentLanguage = $g_bLanguage;
    $oUserSettings->setColumn("LANGUAGE", $languageCode);
}
else
{
    $sCurrentLanguage = "english";
}

my $status = $oUserSettings->update();

if ($status < 0)
{
    $oUserSettings->rollback();
    my $sMessage = $oErr->ReturnMessageGivenCode(1330);
    XDErrorToBrowser(undef, $sMessage, undef, $oToken)
}
else
{
    $oUserSettings->commit();

    if (defined $g_bLanguage)
}

```

```
{  
##set the cookie for language  
$oCookie->setElement  
({  
'language' => $g_bLanguage  
});  
print "Set-Cookie: ", $oCookie->asString();  
}  
  
## Redirect the browser to the succesfull save page.  
  
### Edited by Justin so that we get the partner_code out  
### of cookie instead of the token table.  
# print xd_web_redirect  
# {  
#   "/account/profile/$sCurrentLanguage/saved.html",  
#   $oToken->data('partner_code')  
# };  
  
print xd_web_redirect  
(  
  "/account/profile/$sCurrentLanguage/saved.html",  
  $oCookie->getElement('partner')  
);  
  
$oUserSettings->finish();  
$oUserSettings->disconnect();  
$oDBO->disconnect();  
}
```

### **###share\_a\_file.cgi**

```
#!/usr/bin/perl

use lib ($ENV{PERL_XDRIVE_LIB});

use XDrive::Client::Quota;
use Math::TrulyRandom;
use XDrive::DatabaseO;
use XDrive::DatabaseO::Search;
use XDrive::DatabaseO::Transaction;
use XDrive::DatabaseO::Table::UserData;
use XDrive::Utils::RandomString;
use XDrive::CGI;

use Mail::Sendmail;
use CGI::Carp qw(fatalsToBrowser);
use CGI;
use XDrive::Template;
use XDrive::Client::Security;
use XDrive::Error;
use XDrive::Library;
use XDrive::CGI::Cookie;

use strict;

&main();

sub main {
    my $cgi = CGI->new();
    my $oErr = new XDrive::Error;
    my $xdDBH = XDrive::DatabaseO->new();

    my $oCookie = new XDrive::CGI::Cookie('x_session_info', $cgi);

    #####
    ## Attempt to autenticate the user
    #####
    my $oToken = xd_security_check($xdDBH, $cgi, $oErr);

    #####
    ## If the autentication fails or there is an error during the
    ## autentication phase then redirect to the error CGI
    #####
    if ($oErr->Occurud) {
        xd_fatal_error($cgi, $oErr);
        $xdDBH->disconnect();
        exit;
    }

    #####
    ## Otherwise we have a valid session
    #####
}
```

```

#### Edited by Justin so that the partner_code is looked for
#### in the cookie instead of the token table.
# my $sPartner = $oToken->data('partner_code');
my $sPartner = $oCookie->getElement('partner');
my $nUser_ID = UserIdGet($oToken->data('user'));

## Grab the user info from the Database
my $oUserInfo = XDrive::DatabaseO::Table::UserData->new({}, $xdDBH);

my $sFileName = $cgi->param("sFileName");
my $bHelp = $cgi->param("help");

my $sFriendsEmail = &get_friends_emails($cgi);
my $sEmailSubject = $cgi->param('sEmailSubject');
my $sEmailMessage = $cgi->param("sEmailMessage");
my $sFileDescription = $cgi->param("sFileDescription");

my ($sRandomKey, $sFilePath);

## Load user info where the SEQ = $nUser_ID
$oUserInfo->loadWhere("SEQ", $nUser_ID);

my $sUser_name = $oUserInfo->fetchColumn("NAME_FIRST") . " " . $oUserInfo-
>fetchColumn("NAME_LAST");
my $sUser_email = $oUserInfo->fetchColumn("EMAIL_ADDRESS");

if ($sFriendsEmail)
{
    $sFilePath="/";
    $sFileName =~ m%(.*)/(.*)%;

    #inserted this code to catch documents that are not in a folder
    my $tempFilePath = "/" . $1;
    my $tempFileName = $2;

    if ($tempFileName ne "")
    {
        $sFileName=$tempFileName;
        $sFilePath=$tempFilePath;
    }

    &verify_database_values($nUser_ID, $sFileName, $sFilePath,
                           $sFilePath, $sFileName,
                           $sFileDescription,$oToken,$oErr);

    ## Insert the info into the disk_item_share table, and get the
random key
    $sRandomKey = &insert_file_into_database($nUser_ID, $sFileName,
$sFilePath, $sFileDescription, $xdDBH,$oToken,$oErr);

&send_mail($sFriendsEmail, $sEmailSubject, $sEmailMessage, $sFileDescription,
$sUser_name, $sUser_email, $nUser_ID, $sRandomKey,$sPartner,$oToken,$oErr,$cgi);

    &display_thank_you($sPartner);

```

```

    }
    else {
        $oUserInfo->finish();
        $xdDBH->disconnect();
        &display_form($sFileName, $bHelp, $sPartner);
    }

    $oUserInfo->finish();
    $oUserInfo->disconnect();
}

sub send_mail {
    my ($sFriendsEmail, $sEmailSubject, $sEmailMessage, $sFileDescription,
        $sUser_name, $sUser_email, $nUserID, $sRandomKey,
        $sPartner, $oToken, $oErr, $oCGI) = @_;

    ##get language from the cookie. If not english, append language code to
    url
    my $oCookie = new XDrive::CGI::Cookie('x_session_info', $oCGI);
    my $language = $oCookie->getElement('language');
    if ($language ne 'english')
    {
        if ($language eq 'spanish')
        {
            $sRandomKey .= "-SP";
        }
    }

    $sEmailMessage = &get_message($sEmailMessage,
        $sRandomKey, $sPartner, $nUserID);

    my %toXdrive =
        (
        To      => "$sFriendsEmail",
        From    => "$sUser_name <$sUser_email>",
        Message => $sEmailMessage,
        Subject => "$sEmailSubject",
        );
}

unless (sendmail %toXdrive)
{
    warn "## Mail error ".$Mail::Sendmail::error;
    if ($Mail::Sendmail::error =~ /451/)
    {
        my $sMessage = $oErr->ReturnMessageGivenCode(1310);
        XDErrorToBrowser("", $sMessage, undef, $oToken);
    }
    else
    {
        my $sMessage = $oErr->ReturnMessageGivenCode(1311);
        XDErrorToBrowser("", $sMessage, undef, $oToken);
    }
    exit(1);
}
}

sub get_message {

```

```

my ($sEmailMessage, $sRandomKey,$sPartner,$n_UserID) = @_;

my $oMessage = new XDrive::Template;
$oMessage->partner($sPartner);
$oMessage->load('share_a_file_message.thtml');

$oMessage->tags
  ({
    'Message' => $sEmailMessage,
    'RandomKey' =>$sRandomKey,
    'nUser_ID' =>$n_UserID,
    'sender' =>$ENV{'HTTP_HOST'},
  });

return $oMessage->get;

}

sub display_form {
  my ($sFileName, $bHelp,$sPartner) = @_;
  my $oForm = new XDrive::Template;
  $oForm->partner($sPartner);
  $oForm->load('share_a_file.thtml');

  my $sHelp='';

  if ($bHelp eq 'true')
  {
    my $oHelp = new XDrive::Template;
    $oHelp->partner($sPartner);
    $oHelp->load('share_a_file_help.thtml');
    $sHelp = $oHelp->get;
  }

  $oForm->tags
    ({
      'sFileName' => $sFileName,
      'helptext' => $sHelp
    });

  print header, $oForm->get;
  exit(0);
}

sub display_thank_you {
  my $sPartner = shift;
  my $oForm = new XDrive::Template;
  $oForm->partner($sPartner);
  $oForm->load('share_a_file_t_y.thtml');
  print header, $oForm->get;
  exit(0);
}

sub verify_database_values {
  my ($nUserID, $sFileName, $sFilePath, $sFilePath, $sFileName,
  $sDescription,$oToken,$oErr) = @_;
}

```

```

if (length($sDescription) > 255) {
    my $sMessage = $oErr->ReturnMessageGivenCode(1320);
    XDErrorToBrowser("", $sMessage, undef, $oToken);
}

if (length($sFilePath) > 255) {
    my $sMessage = $oErr->ReturnMessageGivenCode(1321);
    XDErrorToBrowser("", $sMessage, undef, $oToken);
}

if (length($sFileName) > 255) {
    my $sMessage = $oErr->ReturnMessageGivenCode(1322);
    XDErrorToBrowser("", $sMessage, undef, $oToken);
}

}

sub insert_file_into_database {
    my ($nUser_ID, $sFileName, $sFilePath, $sFileDescription,
$xdDBH, $oToken, $oErr) = @_;

    my @characters = ('a'..'z', 'A'..'Z', '0'..'9');

    ##seed random number generator
    srand(truly_random_value());
    my $gmTime = time;
    ##grab length of time
    my $randLen = 32 - length($gmTime);
    my $sRandomKey = XDRandomString($randLen, \@characters);
    ##now we have a Random key
    $sRandomKey = $gmTime . $sRandomKey;
    ## at this point we have a random number
    ## of length gmTime with the current gmt time appended to it

    my $transaction = XDrive::Database0::Transaction->new($xdDBH);
    my $status = $transaction->insertDiskItemShare($nUser_ID, $sRandomKey,
$sFilePath, $sFileName, $sFileDescription);

    if ($status < 0)
    {
        $transaction->rollback();
        my $sMessage = $oErr->ReturnMessageGivenCode(1323);
        XDErrorToBrowser("", $sMessage, undef, $oToken);
        exit(1);
    }
    else
    {
        $transaction->commit();
    }

    return $sRandomKey;
}

```

```
sub get_friends_emails {
    my $cgi = shift;
    my ($email_list, @email_array);

    if (length $cgi->param('sFriendsEmail0') > 0)
    {
        push(@email_array, $cgi->param('sFriendsEmail0'));
    }

    if (length $cgi->param('sFriendsEmail1') > 0)
    {
        push(@email_array, $cgi->param('sFriendsEmail1'));
    }

    if (length $cgi->param('sFriendsEmail2') > 0)
    {
        push(@email_array, $cgi->param('sFriendsEmail2'));
    }

    if (length $cgi->param('sFriendsEmail3') > 0)
    {
        push(@email_array, $cgi->param('sFriendsEmail3'));
    }

    if (length $cgi->param('sFriendsEmail4') > 0)
    {
        push(@email_array, $cgi->param('sFriendsEmail4'));
    }

    $email_list = join(", ", @email_array);
    return $email_list;
}
```

### ###signup\_account.cgi

```
#!/usr/bin/perl
## -d:DProf
## -d:SmallProf
## Written by Martin Hald <mhalld@uci.edu> on Wed Apr 7 1999. This program
## adds new users to the database.
## Modified by Justin White for cookie referee and promo stuff and to make
## mod_perl friendly and to work with changes to the Security module and
## to get rid of the XDrive::CGI module and to create a CGI object.

use strict;
use lib ($ENV{PERL_XDRIVE_LIB});

use CGI;
use CGI::Carp qw(fatalsToBrowser);
use XDrive::Client::Registration;
use XDrive::Error;
use XDrive::Client::Security;
use XDrive::Template;
use XDrive::DatabaseO::Table::UserData;
use XDrive::DatabaseO::Transaction;
use XDrive::DatabaseO::Table::UserQuota;
use XDrive::DatabaseO::Table::Promo;
use XDrive::DatabaseO::Table::DiskAccount;
use XDrive::DatabaseO::Table::Reseller;
use XDrive::Template;
use XDrive::DatabaseO::Search;
use XDrive::CGI::Cookie;
use XDrive::Library;
use Mail::Sendmail;
use CGI qw(param redirect header cookie);

BEGIN
{
    push(@INC, "/export/home/www/thirdparty/mint2/perl");
}

use Mint2;

&main;

exit;

sub main {
    my $oCGI      = new CGI;
    my $oCookie   = XDrive::CGI::Cookie->new('x_session_info', $oCGI);
    my $oSTDCookie = XDrive::CGI::Cookie->new('xd_std_info', $oCGI);

    my $file_found;

    ### Use the new XDrive::CGI::Cookie now.
    my $promo_uri      = $oCookie->getElement('promo');
    my $ref_seq_cookie = $oCookie->getElement('referee');
    my $referred_from  = $oCookie->getElement('referred_from');
```

```

my $claim_ticket = $oCookie->getElement('ct');

my $ref_seq_param      = $oCGI->param('referee');
my $password           = $oCGI->param('password');
my $password_confirm   = $oCGI->param('password_confirm');
my $birth_year          = $oCGI->param('birth_year');
my $username            = $oCGI->param('username');
my $name_first          = $oCGI->param('name_first');
my $name_last           = $oCGI->param('name_last');
my $email_address       = $oCGI->param('email_address');
my $country_seq         = $oCGI->param('country');
my $gender_seq          = $oCGI->param('gender');
my $postal_code         = $oCGI->param('zip2');
my $occupation_seq     = $oCGI->param('occupation');
my $referee             = $oCGI->param('referee');
my $marketing           = $oCGI->param('marketing');
my $newsletter          = $oCGI->param('newsletter');
my $media_type_seq      = $oCGI->param('media_type');

## PARAMS TO GATHER IF THIS IS CALLED FROM SKIP
## THE DOWNLOAD
my $sSTDPartner = $oSTDCookie->getElement('STDPARTNER');
my $sLanguage    = $oSTDCookie->getElement('LANG');
my $sFileURL    = $oSTDCookie->getElement('FILEURL');
my $sFileName   = $oSTDCookie->getElement('FILENAME');
my $sAltURL     = $oSTDCookie->getElement('ALTURL');
my $sCatId      = $oSTDCookie->getElement('CATID');
my $sGid        = $oSTDCookie->getElement('GID');
my $sSid         = $oSTDCookie->getElement('SID');

## check if database is up
my $oDBO;
my $oSearch;
if (XDDBConnectionCheck() && XDNFSCheck())
{
    ## connection good proceed normally
    $oDBO    = new XDrive::Database0(undef);
    $oSearch = XDrive::Database0::Search->new($oDBO);
}
else
{
    ## connection bad write data to a temp file and load
    ## upgrading page telling them that they will be
    ## informed once X:drive is up
    $oDBO    = undef;
    $oSearch = undef;
    my $tempVar;

    my $tempEmail = $oCGI->param('friends_email1');
    my $numFriends = $oCGI->param('numFriends');

    my $addrArray  = $tempEmail;
    my $nameArray  = $oCGI->param('friends_name1');

```

```

## generate list for the javascript array
for (my $i = 2;$i <= $numFriends;$i++)
{
    $tempVar = $oCGI->param('friends_email' . $i);

    if ($tempVar)
    {
        $addrArray .= "~" . $tempVar;
        $nameArray .= "~" . $oCGI->param('friends_name' . $i);
    }
}

reg_while_down (
    $promo_uri,
    $ref_seq_cookie,
    $referred_from,
    $claim_ticket,
    $ref_seq_param,
    $password,
    $birth_year,
    $username,
    $name_first,
    $name_last,
    $email_address,
    $country_seq,
    $gender_seq,
    $postal_code,
    $occupation_seq,
    $referee,
    $marketing,
    $newsletter,
    $media_type_seq,
    $nameArray,
    $addrArray
);

## leave and show upgrading page test me
print redirect("/upgrading_signup_success.html");
exit;
}

##my $oDBO      = new XDrive::Database0(undefined);
##my $oSearch   = XDrive::Database0::Search->new($oDBO);

#####
### If media_type_seq equals 'notset', then set it to NULL.
#####
$media_type_seq = '' if $media_type_seq eq 'notset';

my $partner_code = 'xdrv';
my $partner_seq = 1;

my $promo_seq;

#####
### Check to see how the referee sequence, if any, was passed in.
### If it was passed in via cookie, then use that. Else, assume

```

```

### that it is a form parameter.
#####
my $ref_seq = $ref_seq_cookie ? $ref_seq_cookie : $ref_seq_param;

#####
### If we were passed a promo uri, then let's get the promo seq
### from promo table using Promo.pm to pass to xd_client_register.
#####
if ($promo_uri) {
    my $oPromoInfo = XDrive::DatabaseO::Table::Promo->new(undef,$cDBO);
    $oPromoInfo->loadWhere('URI', $promo_uri);
    $promo_seq = $oPromoInfo->fetchColumn('SEQ');

    $oPromoInfo->finish();
}

#####
### Load the required template HTML files.  The content that we load
depends
### on if the new registration went through or if we need to have them re-
fill
### the form.
#####
my $oContent      = new XDrive::Template( { 'partner_code' => 'xdrv' } );
my $oLayout       = new XDrive::Template( { 'partner_code' => 'xdrv' } );
my $oNavigation  = new XDrive::Template( { 'partner_code' => 'xdrv' } );

my $oErr = new XDrive::Error;

$oContent->load('front_signup.thtml');
$oNavigation->load('front_nav.thtml');
$oLayout->load('layout.thtml');

#####
### Perform data validation
#####
if ($password ne $password_confirm) {
    $oErr->AddErrorByErrorCode(709);
}

#####
### Attempt to register the user if no errors have been logged
#####
if (! $oErr->Occurud ) {
    xd_client_register( {
        'birth_year'          => $birth_year,
        'partner_seq'         => $partner_seq,
        'username'            => $username,
        'password'            => XDEncrypt($password),
        'name_first'          => $name_first,
        'name_last'           => $name_last,
        'email_address'       => $email_address,
        'country_seq'         => $country_seq,
        'gender'              => $gender_seq,
        'postal_code'         => $postal_code,
        'occupation_seq'      => $occupation_seq,
        'referee'             => $ref_seq,
    });
}

```

```

        'marketing'      => $marketing,
        'newsletter'    => $newsletter,
        'partner_code'   => $partner_code,
        'promo_seq'      => $promo_seq,
        'media_type_seq' => $media_type_seq},
$oCGI, $oErr, $oDBO );
}

if ($oErr->MaxIndex() < 0) {
    ## No errors occurred, the user has already been added to the
    ## database through the xd_client_register subroutine so now
    ## send the user an email and then
    ## log the user and go to the user's homepage.

    client_email_send($username,
                       $name_first,
                       $name_last,
                       $email_address,
                       'X\drive Team <team@xdrive.com>',
                       'Welcome to X:drive! - Important Account
Information',
                       $partner_code,
                       $promo_seq);

    #####
    ### If we have a claim ticket, then remove that ticket
    ### from the batch_user_data table because the user has
    ### been added and we don't need that data anymore.
    #####
    if ($claim_ticket) {
        my $oTransaction = XDrive::DatabaseO::Transaction-
>new($oDBO);

        my $rv = $oTransaction->removeClaimTicket($claim_ticket);

        if ($rv == 1) {
            $oTransaction->commit();
        }
        else {
            $oTransaction->rollback();
        }
    }

    ##if we have a referee seq, give the referee additional space
    if ($ref_seq >= 1) {

        ## johngaa add to exclude college club and quepasa users out
        my $oUserData = XDrive::DatabaseO::Table::UserData-
>new(undef,$oDBO);
        $oUserData->loadWhere("SEQ", $ref_seq);
        my $reseller_seq = $oUserData->fetchColumn("RESELLER_SEQ");
        if (!isResellerSeqCC_QUPA($oDBO,$reseller_seq))
        {

            ## end of johngaa

```

```

        my $oUserQuota = XDrive::DatabaseO::Table::UserQuota-
>new(undefined, $oDBO);
        $oUserQuota->loadWhere("USER_SEQ", $ref_seq);
        my $additional_quota = $oUserQuota->incrementQuota($ref_seq,
5120);

        if ($additional_quota > 0) {

&send_email_referee($ref_seq,$oDBO,$oCookie,$additional_quota,$referred_from);
    }

    $oUserQuota->finish();
}

##if the user is from Cybergold, process through Cybergold
if ($promo_uri =~ /cybergold/) {
    my ($code, %res) =
&contact_cybergold($oCGI,$username,$email_address);
}

##if user is coming from the befree promo
##write to file that they've signed up
if ($promo_uri =~ /befree/) {
    &write_befree_log($oCGI);
}

if ($sFileURL eq '') {

    client_login($username, $oCGI);

} else {

    std_login($username,
              $oCGI,
              $sSTDPartner,
              $sLanguage,
              $sFileURL,
              $sFileName,
              $sAltURL,
              $sCatId,
              $sGid,
              $sSid);
}

$oSearch->disconnect();

exit;
}
else {
    ## Reload the signup form, show the errors and pre-fill all
    ## the form elements except the password.

    ##if we are overriding standard registration form
    ##load it here
}

```

```

        if ($promo_uri)
        {
            $file_found = $oContent->load($promo_uri .
'_registration.thtml');
            if (!$file_found)
            {
                $file_found = $oContent-
>load('promo_registration.thtml');
            }
        }

        if ((!$promo_uri) || (!$file_found))
        {
            $oLayout->load("layout.thtml");
            $oNavigation->load("front_nav.thtml");
            $oContent->load("front_signup.thtml");
        }
    }

    my ($select_marketing, $select_newsletter);

    my $checked = "CHECKED";

    if ($marketing eq 'on') {
        $select_marketing = $checked;
    }

    if ($newsletter eq 'on') {
        $select_newsletter = $checked;
    }

## IMPORTANT ##
## make sure to put all non text fields at the top of
## the tags function or it will gag

## Search and replace the following tags
    $oContent->tags( {'country'          =>
xd_form_countries($country_seq, $oSearch),
                    'occupation'       =>
xd_form_occupation($occupation_seq, $oSearch),
                    'media_type'        =>
xd_form_media_type($media_type_seq, $oSearch),
                    'gender'           =>
xd_form_gender($gender_seq, $oSearch),
                    'select_marketing'  => $select_marketing,
                    'select_newsletter' => $select_newsletter,
                    'errors'            => format_errors($oErr),
                    'username'          => $username,
                    'name_first'        => $name_first,
                    'name_last'         => $name_last,
                    'email_address'     => $email_address,
                    'birth_year'         => $birth_year,
                    'postal_code'        => $postal_code} );

## 
## Added to have tell a friend support in registration
##

```

```

    my (@addrArray, @nameArray, $tempIndex, $tempName, $tempEmail,
$tempNum);

    ## tell a friend data will be coming in to signup_form
    ## seperated by commas

    @addrArray = split //,$oCGI->param('friends_email_array');
    @nameArray = split //,$oCGI->param('friends_name_array');

    $tempNum = $oCGI->param('numFriends');

    for (my $tempIndex=1;$tempIndex <= $tempNum;$tempIndex++) {
        $tempName = 'friends_name' . $tempIndex;
        $tempEmail = 'friends_email' . $tempIndex;

        $oContent->tags( {$tempName => $oCGI->param($tempName),
                           $tempEmail => $oCGI->param($tempEmail)} );

    }

    ## Clear the content of any unused tags.
    $oContent->clear;
}

##if we are loading a non-standard registration, it's only one page
if (($promo_uri) && ($file_found))
{
    print $oCGI->header(), $oContent->get;
}
else
{
    ## Print out the HTML and exit
    $oLayout->tags( {'header_graphic' => 'header_registration.gif',
                      'title'      => 'Register Now!',
                      'content'    => $oContent->get,
                      'navigation' => $oNavigation->get} );

    print $oCGI->header(), $oLayout->get;
}

$oSearch->disconnect();

return 0;
}

sub isResellerSeqCC_QUPA
{
    my $oDBO = shift;
    my $reseller_seq = shift;
    my $dbh = $oDBO->fetchDBH();

    my $sql_stmt = "SELECT code FROM reseller WHERE seq=?";
    my $cmd;
    my @data;

    $cmd = $dbh->prepare($sql_stmt);

```

```

$ccmd->execute((\$reseller_seq));
@data = $ccmd->fetchrow_array;
if ($data[0] eq 'cc' || $data[0] eq 'cupa')
{
    return 1;
    ##print "should return a true\n"
}
return 0;
}

#####
## reg_while_down: Grabs all data that is needed to register a user
## routine will add the data to a file in the tmp directory of the name
## reg_while_down.datetime
#####
sub reg_while_down
{
    my ($promo_uri,$ref_seq_cookie,$REFERRED_from,$claim_ticket,
        $ref_seq_param,$password,$birth_year,$username,$name_first,
        $name_last,$email_address,$country_seq,$gender_seq,$postal_code,
        $occupation_seq,$referee,$marketing,$newsletter,$media_type_seq,
        $stell_a_friend_name,$stell_a_friend_addr) = @_;

    my $filename = XDGetRegDatFile();
    open OUTFILE, ">>$filename";

    print OUTFILE "$promo_uri,$ref_seq_cookie,$REFERRED_from,";
    print OUTFILE "$claim_ticket,$ref_seq_param,$password,";
    print OUTFILE "$birth_year,$username,$name_first,";
    print OUTFILE "$name_last,$email_address,$country_seq,";
    print OUTFILE "$gender_seq,$postal_code,$occupation_seq,";
    print OUTFILE "$referee,$marketing,$newsletter,$media_type_seq,";
    print OUTFILE "$stell_a_friend_name,$stell_a_friend_addr\n";
    close OUTFILE;
}

#####
## format_errors: Accept an error object and return an ordered list of
## errors in HTML format.
#####

sub format_errors {
    my $oErr = shift; ## (I) errors

    my $txt;          ## formated HTML
    my $bPassword;   ## has a password error been found?

    $txt .= "<ol>\n";

    my $nNumErrors = $oErr->MaxIndex();

    for (my $i = 0;$i <= $nNumErrors;$i++) {
        my $error = $oErr->Message();

        if ($error =~ /password/) {

```

```

        $bPassword = 1;
    }

    $txt .= "<li><font color=RED>$error</font>\n";
}

if (! $bPassword) {
    $txt .= "<li><font color=RED>Please re-enter your
password</font>\n";
}

$txt .= "</ol>\n";

return $txt;
}

#####
## client_login: Create the needed token to identify the client and redirect
## them to thier new homepage.
#####

sub client_login ($$) {
    ## No errors occurred, add the user to the parter/user->real
    ## user mapping and return a success code.

    my $username = shift;
    my $oCGI      = shift;

    my $oDBO      = new XDrive::Database0(undef);
    my $oCookie   = XDrive::CGI::Cookie->new('x_session_info', $oCGI);

    #####
    ### Check the x_session_info cookie for promo or referee and
    ### if they exist, delete those hash elements and reset the cookie.
    #####
    my $promo_cookie = $oCookie->getElement('promo');
    my $ref_cookie   = $oCookie->getElement('referee');

    if ($ref_cookie || $promo_cookie) {
        $oCookie->deleteElement('referee') if $ref_cookie;
        $oCookie->deleteElement('promo')   if $promo_cookie;

        print "Set-Cookie: ", $oCookie->asString();
    }

    my $oError = new XDrive::Error;
    my $oToken = xd_login($oCGI, $username, $oError, $oDBO);

    ## we need to do all of this to get the reseller code to show the correct
page
    my $oDiskAccount = XDrive::Database0::Table::DiskAccount->new(undef,
$oDBO);

    $oDiskAccount->loadWhere("USERNAME", $username);
}

```

```

my $oUser = XDrive::DatabaseO::Table::UserData->new(undef,
$oDiskAccount->fetchDBO);

$oUser->loadWherePK($oDiskAccount->fetchColumn("USER_SEQ"));

my $oReseller = XDrive::DatabaseO::Table::Reseller->new(undef,
$oDiskAccount->fetchDBO);

$oReseller->loadWherePK($oUser->fetchColumn("RESELLER_SEQ"));

my $oTemplate = new XDrive::Template;

$oTemplate->partner($oReseller->fetchColumn("CODE"));

## originally this is where the signup_form.cgi goes
##$oTemplate->load('splash.thtml');
$oTemplate->load('tell_a_friend_frame.thtml');

##my $addrArray = $oCGI->param('friends_email_array');
##my $nameArray = $oCGI->param('friends_name_array');
##my $numFriends = $oCGI->param('numFriends');

## generate list for the javascript array
##my @addrList = split //, $addrArray;
##my @nameList = split //, $nameArray;

##$addrArray = "";
##$nameArray = "";

##my $count = @addrList - 1;

##for (my $i = 0;$i < $count;$i++) {
##    ##$addrArray .= "\"" . $addrList[$i] . "\",";
##    ##$nameArray .= "\"" . $nameList[$i] . "\",";
##}
## this will add the quote without the comma

##$addrArray .= "\"" . $addrList[$count] . "\"";
##$nameArray .= "\"" . $nameList[$count] . "\"";
## gets the array started
my $tempVar;

my $tempEmail = $oCGI->param('friends_email1');
my $numFriends = $oCGI->param('numFriends');

my $addrArray = "\"" . $tempEmail . "\"";
my $nameArray = "\"" . $oCGI->param('friends_name1') . "\"";

## generate list for the javascript array
for (my $i = 2;$i <= $numFriends;$i++)
{
    $tempVar = $oCGI->param('friends_email' . $i);

    if ($tempVar)
    {
        $addrArray .= ",\"" . $tempVar . "\"";
    }
}

```

```

        $nameArray .= ",\"" . $oCGI->param('friends_name' . $i) . "\";

    }

}

$oTemplate->tags( { 'numFriends'          => $numFriends,
                     'friends_name_array' => $nameArray,
                     'friends_email_array' => $addrArray} );

print $oCGI->header();

print $oTemplate->get();

$oDiskAccount->finish();
$oUser->finish();
$oReseller->finish();
$oDiskAccount->disconnect();
}

#####
## Login in user who is comming from a Skip The Download
## Registration
#####

sub std_login () {
    my $username      = shift;
    my $oCGI          = shift;
    my $sSTDPartner  = shift;
    my $sLanguage     = shift;
    my $sFileURL     = shift;
    my $sFileName     = shift;
    my $sAltURL      = shift;
    my $sCatId       = shift;
    my $sGid          = shift;
    my $sSid          = shift;
    my $oDBO          = new XDrive::Database0(undefined);

    my $oError = new XDrive::Error;
    my $oToken = xd_login($oCGI, $username, $oError, $oDBO);
    xd_set_session_cookie($oCGI, $sSTDPartner, $sLanguage);

    my $oTemplate = new XDrive::Template
    ({
        'partner_code' => $sSTDPartner,
        'language'     => $sLanguage,
        'file'         => 'skip_the_download_from_reg.thtml',
        'tags'         =>
        {
            'FILE_URL'   => $sFileURL,
            'FILE_NAME'  => $sFileName,
            'ALTRUL'     => $sAltURL,
            'LANG'       => $sLanguage,
            'STDPARTNER' => $sSTDPartner,
    });
}

```

```

        'CATID' => $sCatId,
        'GID' => $sGid,
        'SID' => $sSid,
    }
});

$oTemplate->clear();
print "Content-type: text/html\n\n";
print $oTemplate->get();
$oDBO->disconnect();
}

sub contact_cybergold {
    my $oCGI = shift;
    my $msgid = shift;
    my $email = shift;

    my %args = (
        'mint_home' => $ENV{'MINT_HOME'},
        'msg_mode' => 'background_mode',

        'usr_email' => $email,
        'msg_id' => $msgid,

        'pay_type' => 'reward',
        'pay_value' => '1.00',
        'pay_readme' => 'Thanks for registering with X:drive.',

        'co_name' => 'X Drive',
        'co_key' => 'registration',
        'co_account' => '100500900000396',
        'mint_secret' => '184FEB9DB81944502A1C91B2879484B6',

        'mint_url_pay' => 'http://www1.cybergold.com/payserver?pay_server',
        'msg_version' => '2.2'
    );

    my($code, %res) = mint_invoke(\%args);

    ##this is temp code to print out stuff for cybergold
    ##my @keys = keys %res;
    ##my @values = values %res;
    ##while (@keys)
    ##
    ##    die pop(@keys), '=', pop(@values), "\n";
    ##}

    return $code;
}

sub write_befree_log {
    my $oCGI = shift;

    my $source_id = $oCGI->cookie('sourceid');

    ##get the time
    ##needed to figure out name of file to write to
}

```

```

my ($nSec, $nMin, $nHour, $nDay, $nMonth, $nYear, $sDay) =
(localtime(time))[0,1,2,3,4,5,6];

if ($nYear > 99) {
    $nYear = substr($nYear,1,2);
}

## Numeric month is 0-11, so add one
$nMonth++;

## Handle Y2K issue
if ( $nYear >= 80 ) {
    $nYear += 1900;
}
else {
    $nYear += 2000;
}

my $dToday = sprintf("%s%02d%02d", $nYear, $nMonth, $nDay);
my $dTodayFull = sprintf("%02d%02d%s
%02d:%02d:%02d", $nMonth,$nDay,$nYear,$nHour,$nMin,$nSec);

my $text =
"14524098\ts\$dTodayFull\t\$source_id\t1\t1\t1\t0.00\tUSD\tregistration\n";

warn "#BF", $text, "\n";
##open(FILE, ">>xdrive_orders_ \$dToday.txt");
##print FILE $text;
##close(FILE);
}

sub send_email_referee {
    my $user_seq = shift;
    my $oDBO = shift;
    my $oCookie = shift;
    my $additional_quota = shift;
    my $referred_from = shift;

    my $language = $oCookie->getElement('language');
    my $partner = $oCookie->getElement('partner');

    if ($language eq 'spanish') {
        my $text = 'un amigo que usted refirió';
        if ($referred_from eq '2') {
            $text = 'un usted compartió un fishero con';
        }
    }
    else {
        my $text = 'referred';
        if ($referred_from eq '2') {
            $text = 'shared a file with';
        }
    }

    my $text = 'referred';
    if ($referred_from eq '2') {
        $text = 'shared a file with';
    }
}

```

```

}

##comes in as k, change to megabytes
my $mbs = $additional_quota/1024;

my $oUserData = XDrive::Database0::Table::UserData->new(undef, $oDBO);
$oUserData->loadWhere("SEQ", $user_seq);
my $email_address = $oUserData->fetchColumn("EMAIL_ADDRESS");
my $name_first = $oUserData->fetchColumn("NAME_FIRST");
my $name_last = $oUserData->fetchColumn("NAME_LAST");

my $oTemplate = new XDrive::Template( {'language' => $language,
                                       'partner_code' => $partner} );

$oTemplate->load('received_5MB_tellafriend.thtml');

$oTemplate->tags( {'mbs' => $mbs,
                     'text' => $text} );
$oTemplate->clear();

my $message = $oTemplate->get;

my %toXdrive =
(
    To      => "$name_first $name_last <$email_address>",
    Bcc     => '',
    From   => "support@xdrive.com",
    Message => $message,
    Subject => "Congratulations!"
);

sendmail(%toXdrive);

$oUserData->finish();
}

```

### ###signup\_form.cgi

```
#!/usr/bin/perl
## Written by Martin Hald <mhald@uci.edu> on Sat, Jan 30, 1999. Updated
## Fri Apr 5, 1996 to use new templates. Updated Wed Apr 21 1999 to use
## new library code.

use strict;
use lib ($ENV{PERL_XDRIVE_LIB});

use CGI;
use CGI::Carp 'fatalToBrowser';
use XDrive::CGI qw(:MAIN);
use XDrive::Client::Registration;
use XDrive::Template;
use XDrive::DatabaseO::Search;
use XDrive::Library;

use constant XD_REGISTRATION_DEFAULT_COUNTRY => 223;

exit &main;

sub main {
    my $oContent      = new XDrive::Template;
    my $oNavigation   = new XDrive::Template;
    my $oLayout       = new XDrive::Template;
    my $oCGI          = new CGI;

    my $oCookie = XDrive::CGI::Cookie->new('x_session_info', $oCGI);

    my $oSearch;

    my $sReferee      = $oCGI->param('referee');
    my $sClaimTicket  = $oCookie->getElement('ct');

    ## Defaults
    my $sUsername      = undef;
    my $sNameFirst     = undef;
    my $sNameLast      = undef;
    my $nYOB           = undef;
    my $nPromoSeq      = undef;
    my $nGender         = 3;
    my $sEmailAddress  = undef;

    my ($country_seq, $occupation_seq, $postal_code, $ct_promo_seq);

    my %pullDownHash;
    if (XDDBConnectionCheck() && XDNFSCheck())
    {
        $oSearch = XDrive::DatabaseO::Search->new(undef);
    }
    else
    {
```

```

    $sClaimTicket = undef;
    $oSearch = undef;
    %pullDownHash = generate_db_array();
}
if ($sClaimTicket) {
    my $rhData = getUserData($oSearch, $sClaimTicket);

    if ($rhData) {
        my $oNewCgi = CGI->new($rhData);

        $sUsername      = $oNewCgi->param('username');
        $sNameFirst     = $oNewCgi->param('name_first');
        $sNameLast      = $oNewCgi->param('name_last');
        $sEmailAddress  = $oNewCgi->param('email_address');
        $nYOB           = $oNewCgi->param('birth_year');
        $nGender         = $oNewCgi->param('gender');
        $occupation_seq = $oNewCgi->param('occupation_seq');
        $country_seq    = $oNewCgi->param('country_seq');
        $postal_code    = $oNewCgi->param('postal_code');
    }
}

if ($sReferee ne "") {
    # my $oCookie = XDrive::CGI::Cookie->new('x_session_info', $oCGI);
    #     my $sReferred_from = $oCGI->param('type');
    $oCookie->setElement({'partner_code'=>'xdrv'});
    $oCookie->setElement({'language'=>'english'});
    $oCookie->setElement({'referee' => $sReferee});
    $oCookie->setElement({'referred_from' => $sReferred_from});
    print "Set-Cookie: ".$oCookie->asString();
}

$oContent->partner('xdrv');
$oNavigation->partner('xdrv');
$oLayout->partner('xdrv');

## I'm assuming there will be one page and not a series of frames.
## this can be changed if need be
# my $oCookie = XDrive::CGI::Cookie->new('x_session_info', $oCGI);
# my $promo = $oCookie->getElement('promo');

my $promo = $oCookie->getElement('promo');

my $file_found;

##if we have a promo, try to get a special registration page
if ($promo) {
    ##attempt to open a special registration page
    $file_found = $oLayout->load($promo . '_registration.thtml');
    if (!$file_found) {
        ##if we cannot, open the general promo reg page
        $file_found = $oLayout->load('promo_registration.thtml');
    }
}

##is we don't have a promo then use the standard registration
if ( (! $promo) || (! $file_found) ) {

```

```

## Load the required template HTML files.
$oNavigation->load("front_nav.thtml");
$oContent->load("front_signup.thtml");
$oLayout->load("layout.thtml");

$oContent->tags
({
    'username'      => $sUsername,
    'name_first'   => $sNameFirst,
    'name_last'    => $sNameLast,
    'email_address'=> $sEmailAddress,
    'country'       =>
xd_form_countries_db_check(XD_REGISTRATION_DEFAULT_COUNTRY,
$oSearch,\%pullDownHash),
        'occupation'      => xd_form_occupation_db_check(undef,
$oSearch,\%pullDownHash),
        'media_type'       => xd_form_media_type_db_check(undef,
$oSearch,\%pullDownHash),
        'gender'          => xd_form_gender_db_check(undef,
$oSearch,\%pullDownHash),
        'select_marketing'=> 'CHECKED',
        'select_newsletter'=> 'CHECKED',
        'referee'         => $sReferee,
    });

## Print out the HTML and exit
$oLayout->tags
({
    'header_graphic' => 'header_registration.gif',
    'title'           => 'Register Now!',
    'content'         => $oContent->get,
    'navigation'     => $oNavigation->get
});

}
elsif ($sClaimTicket) {
    $oLayout->tags
    ({
        'country'       => xd_form_countries($country_seq,
$oSearch),
        'occupation'   => xd_form_occupation($occupation_seq,
$oSearch),
        'media_type'    => xd_form_media_type(undef, $oSearch),
        'gender'        => xd_form_gender($nGender, $oSearch),
        'select_marketing'=> 'CHECKED',
        'select_newsletter'=> 'CHECKED',
        'username'      => $sUsername,
        'name_first'   => $sNameFirst,
        'name_last'    => $sNameLast,
        'email_address'=> $sEmailAddress,
        'birth_year'    => $nYOB,
        'referee'       => $sReferee,
        'postal_code'   => $postal_code
    });
}
else {
    $oLayout->tags
    ({

```

```

        'country'          =>
xd_form_countries_db_check(XD_REGISTRATION_DEFAULT_COUNTRY,
$oSearch,\%pullDownHash),
        'occupation'      => xd_form_occupation_db_check(undef,
$oSearch,\%pullDownHash),
        'media_type'       => xd_form_media_type_db_check(undef,
$oSearch,\%pullDownHash),
        'gender'           => xd_form_gender_db_check(undef,
$oSearch,\%pullDownHash),
        'select_marketing' => 'CHECKED',
        'select_newsletter'=> 'CHECKED',
        'referee'          => $oCGI->param('referee'),
    });
}

$oLayout->clear;

print $oCGI->header, $oLayout->get;
if (defined $oSearch)
{
    $oSearch->disconnect();
}

return 0;
}

## johngaa add to check of db is up or down
sub generate_db_array
{
    ## create a hash
    my %tempHash;
    my $i = 1;
    my $key;
    my @tempVal;
    open FH,<"down_data.dat";

    while(<FH>)
    {
        chomp $_;
        if ($_ =~ /#(\w+)/g)
        {
            my @newArray;
            $i = 1;
            $key = $1;
            $tempHash{$key} = [ @newArray ];
        }
        else
        {
            @tempVal = split(/\~/,$_);
            $tempHash{$key}->[$i - 1][0] = $tempVal[0];
            $tempHash{$key}->[$i - 1][1] = $tempVal[1];
            $i++;
        }
    }
}

```

```

close FH;
return %tempHash;
}

sub xd_form_countries_db_check
{
    my $default = shift;
    my $oSearch = shift;
    my $pullDownHash = shift;
    my $returnVal;

    if (defined $oSearch)
    {
        $returnVal = xd_form_countries(XD_REGISTRATION_DEFAULT_COUNTRY, $oSearch),
    }
    else
    {
        ## insert alternate source of countries here
        my $temp1 = $pullDownHash->{'country'};
        $returnVal = options_list(XD_REGISTRATION_DEFAULT_COUNTRY,@$temp1);
    }

    return $returnVal;
}

sub xd_form_occupation_db_check
{
    my $default = shift;
    my $oSearch = shift;
    my $pullDownHash = shift;
    my $returnVal;

    if (defined $oSearch)
    {
        $returnVal = xd_form_occupation(undefined, $oSearch),
    }
    else
    {
        ## insert alternate source of countries here
        my $temp1 = $pullDownHash->{'occupation'};
        $returnVal = options_list(undefined,@$temp1);
    }

    return $returnVal;
}

sub xd_form_media_type_db_check
{
    my $default = shift;
    my $oSearch = shift;
    my $pullDownHash = shift;
    my $returnVal;

    if (defined $oSearch)
    {
        $returnVal = xd_form_media_type(undefined, $oSearch),
    }
}

```

```

}

else
{
    ## insert alternate source of countries here
    my $temp1 = $pullDownHash->{'media_type'};
    $returnVal = options_list(undef,@$temp1);
}

return $returnVal;
}

sub xd_form_gender_db_check
{
    my $default = shift;
    my $oSearch = shift;
    my $pullDownHash = shift;
    my $returnVal;

    if (defined $oSearch)
    {
        $returnVal = xd_form_gender(undef, $oSearch),
    }
    else
    {
        ## insert alternate source of countries here
        my $temp1 = $pullDownHash->{'gender'};
        $returnVal = options_list(undef,@$temp1);
    }

    return $returnVal;
}

## end of johngaa add
sub getPromoURI  ($$) {
    my $oSearch    = shift;
    my @promo_seq = (shift);

    my $oDBH = $oSearch->fetchDBO->fetchDBH();

    my $st = "SELECT uri FROM xdrive.promo WHERE seq = ?";

    my $data = $oDBH->selectcol_arrayref($st, undef, @promo_seq);

    return $data->[0];
}

sub getUserData {
    my $oSearch = shift;
    my $sTicket = shift;

    my $oDBH      = $oSearch->fetchDBO->fetchDBH();
    my $sQuery   = "SELECT DATA FROM BATCH_USER_DATA WHERE CODE = ?";
    my $oCursor = $oDBH->prepare($sQuery);
    $oCursor->bind_param(1, $sTicket);
    $oCursor->execute;
}

```

```
my $rh;
my $sData = $oCursor->fetchrow_array();
# my ($sData) = $oCursor->fetchrow_array();
# eval $sData;
# return $rh;
return $sData;
}
```

## ###signup\_success.cgi

```
#!/usr/bin/perl
## This CGI allows us to pass the sst and sid on to the inner frame
##
## Modified by Justin White on 10/14/99 by manually printing the
## header to the browser and getting rid of the XDrive:::CGI import.
## Created new cgi, database, and error objects to pass to xd_security_check.
## Also added the exit in the sub call.

use strict;
use lib ($ENV{PERL_XDRIVE_LIB});

use CGI::Carp qw(fatalsToBrowser);
use CGI ();
use Token;
use XDrive::Client::Security;
use XDrive::Template;
use XDrive::DatabaseO;
use XDrive::Error;
use XDrive::Library;
use XDrive::CGI::Cookie;

&main();

exit;

sub main
{
    my $oCGI      = new CGI;
    my $oDBO      = new XDrive::DatabaseO;
    my $oErr       = new XDrive::Error;
    my $oCookie   = new XDrive::CGI::Cookie('x_session_info', $oCGI);

    #####
    ## Attempt to autenticate the user
    #####
    my $oToken = xd_security_check($oDBO,$oCGI,$oErr);

    #####
    ## If the autentication fails or there is an error during the
    ## autentication phase then redirect to the error CGI
    #####
    if ($oErr->Occurud)
    {
        xd_fatal_error($oCGI,$oErr);
        exit;
    }

    #####
    ## Otherwise we have a valid session
    #####
}
```

```
my $sUsername = $oToken->data('user');

### Edited by Justin so that the partner_code is looked for in
### the cookie instead of the token table.
# my $sPartner = $oToken->data('partner_code');
my $sPartner = $oCookie->getElement('partner');

if (! defined $sPartner)
{
    $sPartner = "xdrv";
    $oCookie->setElement({'partner'=>$sPartner});
    print "Set-Cookie: ",$oCookie->asString();
}

my $oTemplate = new XDrive::Template( {'partner_code' => $sPartner} );

$oTemplate->load('signup_success.thtml');
$oTemplate->tags( {'username' => $sUsername} );

print "content-type: text/html\n\n";

print $oTemplate->get();

$oDBO->disconnect();

return 0;
}
```

### **###signup\_toc.cgi**

```
#!/usr/bin/perl
## Written by Martin Hald <mhald@uci.edu> on Sat, Jan 30, 1999. Updated
## Fri Apr 5, 1996 to use new templates.
##
## Modified by Justin White on 10/11/1999 so that it sets a cookie.
##
## Modified by Martin Hald on 11/15/1999 so that is now accepts
##   - partner
##   - language
##   - agreeuri
##   - disagreeuri

use strict;
use lib ($ENV{PERL_XDRIVE_LIB});

use CGI;
use CGI::Carp qw(fatalToBrowser);
use XDrive::Template;
use XDrive::CGI::Cookie;

&main();

exit;

sub main {
    my $cookie;
    my $sPartnerCode;

    my $oCGI      = new CGI;
    my $oCookie   = XDrive::CGI::Cookie->new('x_session_info', $oCGI);
    my $sReferee  = $oCGI->param('referee');
    my $sPartner  = $oCGI->param('partner');
    my $sLanguage = $oCGI->param('language');
    my $sReferred_from = $oCGI->param('type');

    $oCookie->setElement({'partner_code'=>$sPartner});
    $oCookie->setElement({'language'=>$sLanguage});

    if ($sReferee ne "") {
        $oCookie->setElement({'referee' => $sReferee});
        $oCookie->setElement({'referred_from' => $sReferred_from});
        print "Set-Cookie: ".$oCookie->asString();
    }

    if (! defined $sPartner) {
        $sPartner = 'xdrv';
    }

    ## Load the terms and conditions
    my $hDefaults = {'partner_code'=>$sPartner, 'cookie'=>$oCookie};
    my $oContent  = new XDrive::Template($hDefaults);
    my $oLayout   = new XDrive::Template($hDefaults);
```

```
$oContent->load('presignup.thtml');

if ($sPartner eq 'xdrv') {
    my $oNavigation = new XDrive::Template($hDefaults);
    my $oHeader      = new XDrive::Template($hDefaults);
    my $oFooter      = new XDrive::Template($hDefaults);
    $oLayout->load('layout.thtml');
    $oNavigation->load('front_nav.thtml');
    $oHeader->load('presignup_header.thtml');
    $oFooter->load('presignup_footer.thtml');
    $oContent->tags({ 'header' => $oHeader->get,
                      'footer'  => $oFooter->get, });
    $oLayout->tags({ 'navigation' => $oNavigation->get,
                      'header_graphic' => 'header_registration.gif', });
} else {
    $oLayout->load('tac_wrapper.thtml');
}

my $sAgreeURI     = $oCGI->param('agreeuri');
my $sDisagreeURI = $oCGI->param('disagreeuri');

$oLayout->tags({ 'title'      => 'Terms and Conditions',
                  'content'    => $oContent->get,
                  'agreeuri'   => $sAgreeURI,
                  'disagreeuri'=> $sDisagreeURI, });
$oLayout->clear;

print $oCGI->header();
print $oLayout->get;

return 0;
}
```

### ###skip\_the\_download.cgi

```
#!/usr/bin/perl

use strict;
use lib $ENV{PERL_XDRIVE_LIB};

use CGI qw(param redirect header cookie);
use CGI::Cookie;

use LWP::UserAgent;

use CGI::Carp qw(fatalsToBrowser);
use XDrive::Client::Security;
use XDrive::Client::Actions;
use XDrive::DatabaseO::Table::DiskAccount;
use XDrive::DatabaseO::Search;
use XDrive::DatabaseO::Transaction;
use XDrive::Template;
use XDrive::CGI qw(:MAIN);
use XDrive::CGI::Cookie;
use XDrive::DatabaseO;
use XDrive::Error;

use constant TRUE => (1==1);
use constant FALSE => ! TRUE;
use Token;

my $oDBO = new XDrive::DatabaseO;
main($oDBO);

$oDBO->disconnect;
exit;

#####
## NOTE: Remove the quota check from here. will be handled in java.
#####

sub main
{
    my $oDBO = shift;
    my $oCGI = CGI->new();
    my $oErr = new XDrive::Error;
    my $oCookie = XDrive::CGI::Cookie->new('xd_std_info', $oCGI);

    ## params for file url and file name
    my $sFileURL = $oCGI->param('FILEURL');
    my $sFileName = $oCGI->param('FILENAME');
    my $sAltURL = $oCGI->param('ALTURL');
    my $sSid = $oCGI->param('SID');
    my $sGid = $oCGI->param('GID');
    my $sCatId = $oCGI->param('CATID');
```

```

my $sPartnerCode = $oCGI->param('STDPARTNER');
my $sLanguageCode = $oCGI->param('LANG');
my $sUsername = $oCGI->param('user');
my $sPassword = $oCGI->param('pass');
my $sError = $oCGI->param('error');
my $sCookie = $oCGI->cookie('SST');
my $sessionCookie;
my $sPromo = '';
my $sPartnerParams = "";
my $sCNetString = "";

## IF THE SPECIAL C|NET VARIABLES ARE DECLARED
## THEN GENERATE THE C|NET STRING
## THIS URL IS CALLED FOR ANY FILE DOWNLOADED
## FROM C|NET SO THAT THEY CAN CREDIT THE FILE
## BEING DOWNLOADED
if (
    ($sSid != '') &&
    ($sGid != '') &&
    ($sCatId != '')
) {

    $sAltURL = "http://beta.cnet.com/downloads/0-" . $sCatId . "-107-" .
    $sSid . ".html?tag=ex.dl.xdrive";

    ## IF YOU ARE ON THE TEST SERVERS,
    ## THEN USE C|NET'S TEST URL
    if (
        ($ENV{'HTTP_HOST'} eq 'martini.xdrive.com') ||
        ($ENV{'HTTP_HOST'} eq 'antifreeze.xdrive.com')
    ){

        $sCNetString = "http://abv-sjc2-
export2.cnet.com/downloads/0,10152,0-" .
                        $sCatId .
                        "-110-" .
                        $sSid .
                        ",00.html?gid=" .
                        $sGid .
                        "&tag=ex.dl.xdrivepop.dlcgi." .
                        $sSid;

        ## ELSE, USE THEIR REAL URL
    } else {

        $sCNetString = "http://abv-sjcl-
export2.cnet.com/downloads/0,10152,0-" .
                        $sCatId .
                        "-110-" .
                        $sSid .
                        ",00.html?gid=" .
                        $sGid .
                        "&tag=ex.dl.xdrivepop.dlcgi." .
                        $sSid;
    }
}

```

```

        }

    }

    $sPartnerParams =
"STDPARTNER=$sPartnerCode&LANG=$sLanguageCode&ALTURL=$sAltURL";

    $oCookie->setElement(
    {
        'FILEURL'      => $sFileURL,
        'FILENAME'     => $sFileName,
        'ALTURL'       => $sAltURL,
        'STDPARTNER'   => $sPartnerCode,
        'LANG'          => $sLanguageCode,
        'CATID'         => $sCatId,
        'SID'           => $sSid,
        'GID'           => $sGid,
    });
}

print "Set-Cookie: ". $oCookie->asString();

my $n = 0;
my $rv;

## Create the database object
my $oSearch = XDrive::DatabaseO::Search->new($oDBO);

##The token for the user session
my $oToken;

## If u/p
if (defined $sUsername && defined $sPassword)
{
    ## Auth or fail
    if (xd_auth_password($sUsername, $sPassword, $oDBO))
    {
        $oToken = xd_login($oCGI,$sUsername,$oErr);
        $sessionCookie = xd_set_session_cookie($oCGI, $sPartnerCode,
$sLanguageCode, $sPromo);
    }
    else
    {
        ## Login failed
        my $r = getHTMLContent
        (
            'skip_the_download_login_failed.shtml',
            $sFileURL,
            $sFileName,
            $sAltURL,
            $sPartnerCode,
            $sLanguageCode
        );

        print "Content-type: text/html\n\n";
        print $r;
        return 1;
    }
}

```

```

    }

}

## error or cookie not defined
elsif ( (length($sError) > 0) || (length($sCookie) == 0) )
{
    ## show the login page
    my $r = getHTMLContent('skip_the_download_login.thtml',
                           $sFileURL,
                           $sFileName,
                           $sAltURL,
                           $sPartnerCode,
                           $sLanguageCode
                           );

    print "Content-type: text/html\n\n";
    print $r;
    return 1;
}
else
{
    ## cookie defined so authenticate it
    {
        $oToken = xd_security_check($oDBO,$oCGI,$oErr);
        $sessionCookie = xd_set_session_cookie($oCGI, $sPartnerCode,
$sLanguageCode, $sPromo);

        if ($oErr->Occurud)
        {
            print $oCGI->redirect("/cgi-
bin/skip_the_download.cgi?&error=expired&$sPartnerParams");
            return 1;
        }
    }

    if (!$sFileURL) {
        my $thtml = ($sAltURL != '')? 'skip_the_download_no_alt_error.thtml'
                                    : 'skip_the_download_error.thtml';

        my $sMessage = $oErr->ReturnMessageGivenCode(1220);

        &ThtmlErrorOut($thtml,
                       $sMessage,
                       $sFileURL,
                       $sFileName,
                       $sAltURL,
                       $sPartnerCode,
                       $sLanguageCode
                       );
    }
}

## create the Actions object and download the file
my $oAction = new XDrive::Client::Actions($oToken,$oCGI);

```

```

## set the filename and file url
$oAction->STDFileName($sFileName);
$oAction->STDURL($sFileURL);

## see if file exists. if yes, give em message
my $bFileExists = $oAction->STDFileExists();

if ($bFileExists)
{
    $oDBO->disconnect();
    my $sMessage = $oErr->ReturnMessageGivenCode(1242);

    ErrorOut($sMessage,$sFileURL,$sFileName,$sAltURL,$sPartnerCode,$sLanguageC
ode);
}

## Check that the file is not already being downloaded
if ($oSearch->XDSTDBeingDownloaded($oToken->user,$sFileURL))
{
    $oDBO->disconnect();
    my $sMessage = $oErr->ReturnMessageGivenCode(1243);

    ErrorOut($sMessage,$sFileURL,$sFileName,$sAltURL,$sPartnerCode,$sLanguageC
ode);
}

## Spool the action to download the file
my $oTransaction = new XDrive::Database0::Transaction($oDBO);
my $nSeq = $oTransaction->insertSkipTheDownload
(
    $oToken->user,
    $sFileName,
    $sFileURL,
    0,
    undef
);
$oTransaction->commit;

## Insert failed return an error
if ($nSeq < 0)
{
    $oDBO->disconnect();
    my $sMessage = $oErr->ReturnMessageGivenCode(1244);

    ErrorOut($sMessage,$sFileURL,$sFileName,$sAltURL,$sPartnerCode,$sLanguageC
ode);
}

## IF THE INSERT DIDN'T FAIL,
## AND THE SPECIAL C|NET URL ISN'T NULL
## THEN CREDIT C|NET
elsif ($sCNetString ne '')
{
    my $oUA = new LWP::UserAgent;
    $oUA->agent("XDriveSTD/0.1 " . $oUA->agent);
}

```

```

# Create a request
my $oRequest = new HTTP::Request GET => $sCNetString;

# Pass request to the user agent and get a response back
my $oResult = $oUA->request($oRequest);

}

print redirect("/cgi-
bin/skip_the_download_status.cgi?seq=$nSeq&$sPartnerParams");
}

sub ErrorOut ()
{
    my $sMessage = shift;
    my $sFileURL = shift;
    my $sFileName = shift;
    my $sAltURL = shift;
    my $sPartnerCode = shift;
    my $sLanguageCode = shift;

    my $html = &getHTMLContent('skip_the_download_no_alt_error.thtml',
                               $sFileURL,
                               $sFileName,
                               $sAltURL,
                               $sPartnerCode,
                               $sLanguageCode,
                               $sMessage,
                               );

    print "Content-type: text/html\n\n";
    print $html;
    exit(0);
}

sub ThtmlErrorOut ()
{
    my $thtml = shift;
    my $sMessage = shift;
    my $sFileURL = shift;
    my $sFileName = shift;
    my $sAltURL = shift;
    my $sPartnerCode = shift;
    my $sLanguageCode = shift;

    my $html = &getHTMLContent($thtml,
                               $sFileURL,
                               $sFileName,

```

```

        $sAltURL,
        $sPartnerCode,
        $sLanguageCode,
        $sMessage,
    );

print "Content-type: text/html\n\n";
print $html;
exit(0);
}

sub getHTMLContent
{
    my $thtmlfile = shift;
    my $sFileURL = shift;
    my $sFileName = shift;
    my $sAltURL = shift;
    my $sPartnerCode = shift;
    my $sLanguageCode = shift;
    my $sMessage = shift;

    my $template = new XDrive::Template
    ({
        'partner_code' => $sPartnerCode,
        'language' => $sLanguageCode,
        'file' => $thtmlfile,
        'tags' =>
        {
            'FILE_URL' => $sFileURL,
            'FILE_NAME' => $sFileName,
            'ALTURL' => $sAltURL,
            'LANG' => $sLanguageCode,
            'STDPARTNER' => $sPartnerCode,
            'message' => $sMessage,
        }
    });
}

$template->clear();

return $template->get;
}

## Create a string which makes the previously created
## cookie expire.

sub empty_cookie
{
    my $oSelf = shift;
    my $cookie = new CGI::Cookie
    (
        -name    => 'sst',
        -value   => '',
        -expires => '-1M'
    );
    print header(-cookie=>[$cookie]);
}

```

### ###skip\_the\_download\_status.cgi

```
#!/usr/bin/perl

use lib ($ENV{PERL_XDRIVE_LIB});

use CGI qw(header redirect);
use XDrive::CGI;
use XDrive::Client::Actions;
use XDrive::Client::Security;
use XDrive::Database0;
use XDrive::Database0::Table::SkipDownload;
use XDrive::Template;
use XDrive::Error;
use XDrive::Library;
use Token;

use strict;

use constant TEMP_DIR => XDSTDTempDirectory();

&main;
exit(0);

sub main
{
    ## get parameters
    my $nFileSize;
    my $sTempFile;
    my $sFileName;
    my $sError;
    my $nStatus;
    my $bDone;
    my $percent = 0;
    my $nDownloadedSize = 0;
    my $sURL;
    my $nNow;

    my $oCGI = new CGI();
    my $nSeq = $oCGI->param('seq');
    my $nStart = $oCGI->param('start');
    my $sPartnerCode = $oCGI->param('STDPARTNER');
    my $sLanguageCode = $oCGI->param('LANG');
    my $sAltURL = $oCGI->param('ALTURL');
    my $previous_percent = $oCGI->param('pp');

    ## SET THE CONNECTION_COUNT = 0 IF IT ISN'T PASSED IN
    my $connection_count = ($oCGI->param('cc')) ? $oCGI->param('cc') : 0;

    my $oErr = new XDrive::Error;

    ## get the token and the action object
    my $oDBO = new XDrive::Database0;
    my $oToken = xd_security_check($oDBO,$oCGI,$oErr);
```

```

my $oAction = new XDrive::Client::Actions($oToken,$oCGI);

my $sPartnerParams =
"STDTPARTNER=$sPartnerCode&LANG=$sLanguageCode&ALTURL=$sAltURL";

if ($oErr->Occurud)
{
    print redirect("/cgi-bin/skip_the_download.cgi?$sPartnerParams");
    return;
}

## if the sequence number was passed then get infomation from the database.
if (defined $nSeq)
{
    ## load the information from the database
    my $oSkip = XDrive::DatabaseO::Table::SkipDownload->new(undef, $oDBO);
    $oSkip->loadWhere('SEQ',$nSeq);
    $nFileSize = $oSkip->fetchColumn('FILE_SIZE_BYTES');
    $sTempFile = $oSkip->fetchColumn('FILENAME_FOR_TEMP_FILE');
    $sFileName = $oSkip->fetchColumn('FILE_NAME');
    $nStatus   = $oSkip->fetchColumn('IS_ACTIVE');
    $sError    = $oSkip->fetchColumn('ERROR_CODE');
    $sURL      = $oSkip->fetchColumn('FILE_URL');
    $bDone     = $oSkip->fetchColumn('IS_DONE');
}

## XDRIVE.SKIP_THE_DOWNLOAD.IS_ACTIVE lengend
## 0 - still in queue
## 1 - being downloaded
## 2 - on hold

## IF CONNECTION_COUTN > 9, THEN GO TO THE FILE NOT FOUND (1220) ERROR
## DISPLAY, BUT KEEP TRYING TO DOWNLOAD THE FILE
if ($connection_count >9) {
    $sError=1220;
}

## IF AN ERROR OCCURRED THEN DISPLAY IT
## AND THEN EXIT(0);
if (defined $sError)
{
    if ($sError == 1240)
    {
        &DisplayQuotaError(
            $sURL,
            $sFileName,
            $sAltURL,
            $sPartnerCode,
            $sLanguageCode
        );
    }
    else
    {
        my $oErr = new XDrive::Error;
        $oErr->AddErrorByErrorCode($sError);
        &DisplayError($oErr->Message(),

```

```

        $sURL,
        $sFileName,
        $sAltURL,
        $sPartnerCode,
        $sLanguageCode
    );
}
}

## IF THERE IS NO ERROR, THEN GATHER STATUS
## AND DISPLAY TO THE USER
else
{

## Get file size, later change to get from a tmp file
my $sPath = TEMP_DIR."/".$sTempFile";

## IF STATUS IS LISTED AS DONE IN THE DB,
## THEN SHOW THE DONE PAGE
if ($bDone == 1)
{
    &DisplayDone('',
        $sURL,
        $sFileName,
        $sAltURL,
        $sPartnerCode,
        $sLanguageCode
    );
}

## ELSE FILE IS NOT DONE,
## GATHER MORE DATA AND DISPLAY TO USER
else
{

## IF STATUS IS NOT ACTIVE, OR THE FILE DOESN'T EXIST
## THEN DISPLAY THE CONTACTING SERVER PAGE
## REMOVED: || ! -e $sPath
## FROM CHECK
if (  ($nStatus == 0 || -e $sPath)
    &&(!($previous_percent >= 0))
)
{
    &DisplayContactServer($nSeq,$sURL,$sFileName,$sAltURL,$sPartnerCode,$sLang
    uageCode,$sPartnerParams,$connection_count);
}

## ELSE, GATHER STATUS DATA
## AND DISPLAY TO USER
else
{
    ## Set the start time in seconds since the epoch if not passed

```

```

## as parameter
if (! defined $nStart || $nStart !~ /^\d+$/)
{
    $nStart = time();
}

## IF NO FILE SIZE HAS BEEN SET IN THE DB
## DISPLAY ZERO PERCENTAGES TO THE USER
if (! defined $nFileSize || $nFileSize == 0)
{
    $nFileSize = '0';
    $percent   = '0';
    &DisplayStatus($nSeq,$percent,$sFileName,$nFileSize,'',
                    $nStart,'','');
}

$sAltURL,$sPartnerCode,$sLanguageCode,$sPartnerParams);
}

## ELSE
## * THERE WAS NO ERROR
## * THE FILE WAS NOT DONE
## * THE FILE EXISTS IN THE TEMPORARY DIRECTORY
## * THE DB HAS AN EXPECTED FILE SIZE
## SO READ THE FILE, CALCULATE DATA, AND DISPLAY TO USER
else
{

    ## These checks are performed before inserting the skip
information
    ## into the database, but we will do it again here to be safe.

#    my $sError = $oErr->ReturnMessageGivenCode(141);
#    XDErrorToBrowser("",$sError,undef,$oToken);
#        ##die "Cannot check $sPath" if $sPath =~ /\.\.\./;
#        ##die "Cannot check $sPath" if $sPath =~ /\//\//;

    ## Get the size of the download object
    my @file_info = stat($sPath);

    ## Conver the downloaded file size into KB
    if ($file_info[7] > 0)
    {
        $nDownloadedSize = $file_info[7];

        if ($nFileSize > 0)
        {
            $percent = 100 * $nDownloadedSize/$nFileSize;
        }
        if ($percent < 0)
        {
            $percent = 0;
        }
        $percent = sprintf("%.2f",$percent);
    }
}

```

```

## IF THE FILE IS GONE NOW, OR SOMEOTHER CONDITION, THE USER
## WILL NEVER SEE THE %DONE DROP
## USE WHICH EVER IS LARGER, THE PRECENT THAT WE JUST DISPLAYED
## OF THE ONE THAT WE JUST READ FROM THE FILE SYSTEM
$percent = ($previous_percent > $percent) ? $previous_percent :
$percent;

## We have already transferred some of the file, so we can now
## estimate the download time.
$nNow = time();

my $sInfo;
my $nElapsedSec = $nNow - $nStart;
my $nTransPerSec = 0;

if ($nElapsedSec)
{
    $nTransPerSec = $file_info[7]/$nElapsedSec;
}

if ($nTransPerSec > 0)
{
    my $partial = $percent/100;
    my ($nSecsRemain, $nMin, $nSecs, $nTransPerSecMB);

    if ($partial == 0) {
        $sInfo = '';
    } else {
        $nSecsRemain = ($nElapsedSec/$partial)-$nElapsedSec;
        $nMin = int($nSecsRemain/60);
        $nSecs = $nSecsRemain % 60;
        $nTransPerSecMB = $nTransPerSec/1024;
    }
}

$sInfo = sprintf(", %d:%02d remaining (%.2f
KB/sec)", $nMin, $nSecs
                , $nTransPerSecMB);
}

my $nTrans;

my $k = "KB";
my $nDiv = 1024;
my $nTempSize = $file_info[7] || 0;

if ($nFileSize > 1024*1024)
{
    $k = "MB";
    $nDiv = 1024*1024;
}

if ($nFileSize < 0)
{
    $nFileSize = 0;
}

```

```

    $nFileSize = sprintf("%.2f", $nFileSize/$nDiv);
    $nTrans = sprintf("%.2f", $nTempSize/$nDiv);

    &DisplayStatus($nSeq,$percent,$sFileName,$nFileSize,'',
                    $nStart,$sInfo,$k,
                    $sAltURL,$sPartnerCode,$sLanguageCode,$sPartnerParams);

    ## END OF READING DATA FROM SYSTEM AND
    ## DISPLAYING TO USER
}

## END OF NO EXPECTED SIZE IN DB
## SHOW USER ZERO PERCENTAGES
}

## END OF FILE MUST BE DONE
## SO SHOW A DONE
}

## END OF NO ERROR
}

$oDBO->disconnect;
}

sub DisplayContactServer
{
    my
    ($nSeq,$sURL,$sFileName,$sAltURL,$sPartnerCode,$sLanguageCode,$sPartnerParams,$c
     onnection_count) = @_;
    my ($sHostname) = $sURL =~ /\//\//([^\//]+)\//;
    $connection_count++;

    ## load the status page
    my $template = new XDrive::Template
    ({
        'partner_code' => $sPartnerCode,
        'language' => $sLanguageCode,
        'file' => 'skip_the_download_contacting.thtml',
        'tags' =>
        {
            'hostname' => $sHostname,
            'continue_to' => "/cgi-
bin/skip_the_download_status.cgi?seq=$nSeq&cc=$connection_count&$sPartnerParams"
        },
        'fileName' => $sFileName,
        'altURL' => $sAltURL,
    });
    print "Content-type: text/html\n\n";
    print $template->get;
}

```

```

sub DisplayStatus
{
    my $nSeq = shift;
    my $percent = shift;
    my $filename = shift;
    my $filesize = shift;
    my $transferred = shift;
    my $start = shift;
    my $info = shift;
    my $k = shift;
    my $sAltURL = shift;
    my $sPartnerCode = shift;
    my $sLanguageCode = shift;
    my $sPartnerParams = shift;

    my $percent_disp;

    if ($filesize <= 0)
    {
        $filesize = 'Unknown';
        $k = ' ';
        $percent_disp = 'Unknown';
        $percent = 0;
    }
    else
    {
        $percent_disp = "$percent%";
    }

## load the status page
my $template = new XDrive::Template
    ({
        'partner_code' => $sPartnerCode,
        'language' => $sLanguageCode,
        'file' => 'skip_the_download_status.html',
        'tags' =>
        {
            'PERCENT_DISP' => $percent_disp,
            'PERCENT' => $percent,
            'FILE_NAME' => $filename,
            'FILE_SIZE' => $filesize,
            'TRANSFERRED' => $transferred,
            'TRANSINFO' => $info,
            'K' => $k,
            'URL' => "/cgi-
bin/skip_the_download_status.cgi?seq=$nSeq&start=$start&pp=$percent&$sPartnerPar
ams",
            'altURL' => $sAltURL
        }
    });

$template->clear;
print "Content-type: text/html\n\n";
print $template->get;
}

```

```

sub DisplayDone
{
    my $sMessage = shift;
    my $sFileURL = shift;
    my $sFileName = shift;
    my $sAltURL = shift;
    my $sPartnerCode = shift;
    my $sLanguageCode = shift;

    &ErrorOut('skip_the_download_complete.thtml',
              $sFileURL,
              $sFileName,
              $sAltURL,
              $sPartnerCode,
              $sLanguageCode,
              $sMessage
              );

}

sub DisplayError
{
    my $sError = shift;
    my $sFileURL = shift;
    my $sFileName = shift;
    my $sAltURL = shift;
    my $sPartnerCode = shift;
    my $sLanguageCode = shift;

    my $thtml = ($sAltURL != '')? 'skip_the_download_no_alt_error.thtml'
                                : 'skip_the_download_error.thtml';

    &ErrorOut($thtml,
              $sFileURL,
              $sFileName,
              $sAltURL,
              $sPartnerCode,
              $sLanguageCode,
              $sError
              );

}

sub DisplayQuotaError
{
    my $sError = shift;
    my $sFileURL = shift;
    my $sFileName = shift;
    my $sAltURL = shift;
    my $sPartnerCode = shift;
    my $sLanguageCode = shift;

    &ErrorOut('skip_the_download_quota_error.thtml',

```

```

    $sFileURL,
    $sFileName,
    $sAltURL,
    $sPartnerCode,
    $sLanguageCode,
    $sError
);

}

sub ErrorOut ()
{
    my $sTHTMLFILE = shift;
    my $sFileURL = shift;
    my $sFileName = shift;
    my $sAltURL = shift;
    my $sPartnerCode = shift;
    my $sLanguageCode = shift;
    my $sMessage = shift;

    my $template = new XDrive::Template
    ({
        'language' => $sLanguageCode,
        'partner_code' => $sPartnerCode,
        'file' => $sTHTMLFILE,
        'tags' =>
        {
            'message' => $sMessage,
            'altURL' => $sAltURL,
            'fileURL' => $sFileURL,
            'FILE_NAME' => $sFileName,
            'LANG' => $sLanguageCode,
            'ALTURL' => $sAltURL,
            'STDPARTNER' => $sPartnerCode,
        }
    });
}

my $html = $template->get;

print "Content-type: text/html\n\n";
print $html;
}

```

## ###tell\_a\_friend.cgi

```
#!/usr/bin/perl

use lib ($ENV{PERL_XDRIVE_LIB});

use XDrive::Client::Quota;
use XDrive::DatabaseO::Table::UserData;
use XDrive::DatabaseO;
use Mail::Sendmail;
use CGI::Carp qw(fatalToBrowser);
use CGI;
use XDrive::Library;
use XDrive::Template;
use XDrive::CGI qw(:MAIN);
use XDrive::Client::Security;
use XDrive::Error;

use strict;

&main();

sub main {
    my $oCGI = new CGI;
    my $oErr = new XDrive::Error;
    my $oDBO = new XDrive::DatabaseO;
    my $oCookie = new XDrive::CGI::Cookie('x_session_info', $oCGI);

    #####
    ## Attempt to autenticate the user
    #####
    my $oToken = xd_security_check($oDBO,$oCGI,$oErr);

    #####
    ## If the autentication fails or there is an error during the
    ## autentication phase then redirect to the error CGI
    #####
    if ($oErr->Occurud)
    {
        xd_fatal_error($oCGI,$oErr);
        exit;
    }

    #####
    ## Otherwise we have a valid session
    #####
    my $nUserID = UserIdGet($oToken->data('user'));
    my $oUserInfo = XDrive::DatabaseO::Table::UserData->new(undef,$oDBO);

    ##we now have multiple email fields
    ##get the first one and see if it contains any data
    my $sAddress = $oCGI->param('friends_email1');
```

```

my $sName = $oCGI->param('friends_name1');

$oUserInfo->loadWherePK($nUser_ID);

##$oUserInfo->loadWhere('SEQ', $nUser_ID)
my $sUser_name = $oUserInfo->fetchColumn('NAME_FIRST') . " " . $oUserInfo-
>fetchColumn('NAME_LAST');
my $sUser_email = $oUserInfo->fetchColumn('EMAIL_ADDRESS');
$oUserInfo->finish();
$oUserInfo->disconnect();

if ($sAddress)
{
    &send_mail($sName, $sAddress, $sUser_name, $sUser_email, $nUser_ID,
$oCGI, $oToken, $oErr, $oCookie);
    &display_thank_you($oCGI,$oCookie);
}
else
{
    &display_form($oCGI,$oCookie);
}
}

sub send_mail {
    my ($sName, $sAddress, $sUser_name, $sUser_email, $nUser_ID, $oCGI,
$oToken, $oErr, $oCookie) = @_;

## send out email for each friend only if form is filled out
## get number of friend fields

my $numFriends = $oCGI->param("numFriends");
for (my $i=1; $i<=$numFriends; $i++)
{
    $sAddress = $oCGI->param('friends_email' . $i);
    $sName = $oCGI->param('friends_name' . $i);
    my $sMessage = &get_message($sUser_name, $nUser_ID, $sName,
$sUser_name,$oCookie);

    ##only send the mail if the email address is filled out
    if ($sAddress)
    {
        my %toXdrive =
        (
            To      => "$sName <$sAddress>",
            Bcc     => '',
            From    => "$sUser_email",
            Message => $sMessage,
            Subject => "Check out X:drive!",
        );

        unless (sendmail %toXdrive)
        {
            warn "## Mail error ".$Mail::Sendmail::error;
            if ($Mail::Sendmail::error =~ /451/)
            {
                my $sError = $oErr->ReturnMessageGivenCode(1310);
            }
        }
    }
}
}

```

```

        XDErrorToBrowser("", $sError, undef, $oToken);
    }
}
else
{
    my $sError = $oErr->ReturnMessageGivenCode(1311);

XDErrorToBrowser('tell_a_friend_error.shtml', $sError, undef, $oToken);
}
exit(1);
}
}

}

sub get_formfield {
my ($sNum, $oCookie) = @_;

my $oFormField = new XDrive::Template
(
    {
        'language'      => $oCookie->getElement('language'),
        'partner_code' => $oCookie->getElement('partner'),
    });
$oFormField->load('tell_form_fields.shtml');

$oFormField->tags
(
    {
        'number' => $sNum
    });
}

return $oFormField->get;
}

sub get_message {
my ($sUser_name, $nUser_ID, $sName, $sUserEmail, $oCookie) = @_;

my $oMessage = new XDrive::Template
(
    {
        'language'      => $oCookie->getElement('language'),
        'partner_code' => $oCookie->getElement('partner'),
    });
$oMessage->load('tell_a_friend_message.shtml');

$oMessage->tags
(
    {
        'user_name'   => $sUser_name,
        'nUser_ID'   => $nUser_ID,
        'user_email'  => $sUserEmail,
        'friend_name' => $sName
    });
}

return $oMessage->get;
}

```

```

sub display_form {
    my $oCGI = shift;
    my $oCookie = shift;
    my $oForm = new XDrive::Template
        ({
            'language'      => $oCookie->getElement('language'),
            'partner_code' => $oCookie->getElement('partner'),
        });
    $oForm->load('tell_a_friend.thtml');
    my $numFriends = $oCGI->param("numFriends");

    ##construct the html for multiple input fields
    my $inputFields='';

    for (my $i=1; $i<=$numFriends ; $i++)
    {
        $inputFields = $inputFields . &get_formfield($i,$oCookie);
    }

    $oForm->tags
        ({
            'friendsToTell' => $inputFields,
            'numFriends'   => $numFriends,
        });
    print $oCGI->header, $oForm->get;
    exit(0);
}

sub display_thank_you {
    my $oCGI = shift;
    my $oCookie = shift;
    my $oForm = new XDrive::Template
        ({
            'language'      => $oCookie->getElement('language'),
            'partner_code' => $oCookie->getElement('partner'),
        });
    $oForm->load('tell_a_friend_t_y.thtml');
    print $oCGI->header, $oForm->get;
    exit(0);
}

```

## ###web\_unauthorized.cgi

```
#!/usr/bin/perl
# Written by Martin Hald <mhald@uci.edu> on Sat Feb 13, 1999
#
# Program for showing unauthorized information and allowing the users to
# re-login and possibly showing them a "forgot your password?" link.

use strict;
use lib ($ENV{PERL_XDRIVE_LIB});

use CGI qw(header param);
use CGI::Carp qw(fatalToBrowser);
# use XDrive::CGI qw(:MAIN);
use XDrive::Client::Registration;
use XDrive::Template;
use XDrive::Error;

exit &main;

sub main
{
    my $oCGI = CGI->new();

    my $oLayout = new XDrive::Template;
    my $oContent = new XDrive::Template;
    my $oNavigation = new XDrive::Template;

    $oLayout->partner('xdrv');
    $oContent->partner('xdrv');
    $oNavigation->partner('xdrv');

    $oLayout->load('layout.thtml');
    $oNavigation->load('front_nav.thtml');

    ## Get the error key
    my $sError = $oCGI->param('error');

    ##now get the error message associated with that error
    my $oErr = new XDrive::Error;
    my $message = $oErr->ReturnMessageGivenCode($sError);

    ## Load the required template HTML files.
    my $oForm = new XDrive::Template;
    $oForm->partner('xdrv');
    $oForm->load("front_nav.thtml");
    $oContent->load("unauthorized.thtml");

    ## Update the layout
    $oLayout->tags
    ({
        'header_graphic' => 'header_denied.gif'
    });

    ## Update the content
```

```
$oContent->tags
  ({
    'error_message' => $message
  });
$oContent->clear();

## Print out the HTML and exit
$oLayout->tags
  ({
    'content' => $oContent->get,
    'navigation' => $oNavigation->get,
    'title' => 'Authorization Denied'
  });
print header(), $oLayout->get;

return 0;
}
```

# APPENDIX 2

## Windows Client Code

## Windows Client Code

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```

//



// Module: dlgShareAFile.h
// Subsystem: KnoWare Internet Engine (kwEngine.dll)
// Contents: Declaration module for the dlgShareAFile class.
//
// -----
// Copyright (c) 1999 by X:drive(tm), Inc.
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// All rights reserved.
// -----
// -----
//



#include "stdafx.h"
#include <xdGlobals.h>

#ifndef _VXD_SOURCE_
#include "resource.h"
#endif
#include "dlgShareAFile.h"

#ifndef _DEBUG
#define THIS_FILE
static char THIS_FILE[] = __FILE__;
#endif

// -----
// Implementation
// -----



BEGIN_MESSAGE_MAP(dlgShareAFile, CDialog)
    //{{AFX_MSG_MAP(dlgShareAFile)
    //}}AFX_MSG_MAP
END_MESSAGE_MAP()

// -----
// Method: dlgShareAFile()
// Purpose: Standard constructor
//
dlgShareAFile::dlgShareAFile(CWnd* pParent /*=NULL*/)
    : CDialog(dlgShareAFile::IDD, pParent)
{
    //{{AFX_DATA_INIT(dlgShareAFile)
    m_sFileName = szEMPTY;
    m_sFileDescription = szEMPTY;
    m_sEmailMessage = szEMPTY;
}

```

```

        m_sEmailSubject = szEMPTY;
        m_sEmail0 = szEMPTY;
        m_sEmail1 = szEMPTY;
        m_sEmail2 = szEMPTY;
        m_sEmail3 = szEMPTY;
        m_sEmail4 = szEMPTY;
        //}}AFX_DATA_INIT
    } // End of dlgShareAFile()

    // -----
    // Method: DoDataExchange()
    // Purpose: Standard data exchange handler
    //
    void dlgShareAFile::DoDataExchange(CDataExchange* pDX)
    {
        CDialog::DoDataExchange(pDX);
        //{{AFX_DATA_MAP(dlgShareAFile)
        DDX_Text(pDX, IDC_SHARE_FILENAME, m_sFileName);
        DDX_Text(pDX, IDC_SHARE_FILEDESC, m_sFileDescription);
        DDX_Text(pDX, IDC_SHARE_EMAILMSG, m_sEmailMessage);
        DDX_Text(pDX, IDC_SHARE_EMAILSUB, m_sEmailSubject);
        DDX_Text(pDX, IDC_SHARE_EMAIL1, m_sEmail0);
        DDX_Text(pDX, IDC_SHARE_EMAIL2, m_sEmail1);
        DDX_Text(pDX, IDC_SHARE_EMAIL3, m_sEmail2);
        DDX_Text(pDX, IDC_SHARE_EMAIL4, m_sEmail3);
        DDX_Text(pDX, IDC_SHARE_EMAIL5, m_sEmail4);
        //}}AFX_DATA_MAP
    } // End of DoDataExchange()

    // -----
    // Method: OnInitDialog()
    // Purpose: Called to initialize the contents of the dialog
    //
    BOOL dlgShareAFile::OnInitDialog()
    {
        CDialog::OnInitDialog();

        UpdateData(FALSE);
        return TRUE; // return TRUE unless you set the focus to a control
                    // EXCEPTION: OCX Property Pages should return FALSE
    } // End of OnInitDialog()

    // -----
    // Method: OnOK()
    // Purpose: Called to close out the dialog.
    //

```

```
void dlgShareAFile::OnOK()
{
    UpdateData(TRUE);
    CDialog::OnOK();
} // End of OnOK()
```

```

//



// Module: dlgShareAFile.h
// Subsystem: KnoWare Internet Engine (kwEngine.dll)
// Contents: Declaration module for the dlgShareAFile class.
//
// -----
// Copyright (c) 1999 by X:drive(tm), Inc.
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// All rights reserved.
// -----
// -----
//



#ifndef _INC_DLGSAREAFILE_H_
#define _INC_DLGSAREAFILE_H_


#if _MSC_VER > 1000
#pragma once
#endif // _MSC_VER > 1000


#ifndef _VXD_SOURCE_
#include "resource.h"
#endif


#ifndef _VXD_SOURCE_


// -----
//      dlgShareAFile dialog class
//


class dlgShareAFile : public CDialog
{
public:
    dlgShareAFile(CWnd* pParent = NULL); // standard constructor

    //{{AFX_DATA(dlgShareAFile)
    enum { IDD = IDD_SHARE };
    CString      m_sFileName;
    CString      m_sFileDescription;
    CString      m_sEmailMessage;
    CString      m_sEmailSubject;
    CString      m_sEmail0;
    CString      m_sEmail1;
    CString      m_sEmail2;
    CString      m_sEmail3;
    CString      m_sEmail4;
    //}}AFX_DATA

```

```
//{{AFX_VIRTUAL(dlgShareAFile)
protected:
    virtual void DoDataExchange(CDataExchange* pDX); // DDX/DDV support
//}}AFX_VIRTUAL

protected:
//{{AFX_MSG(dlgShareAFile)
    virtual BOOL OnInitDialog();
    virtual void OnOK();
//}}AFX_MSG
DECLARE_MESSAGE_MAP()
};

//{{AFX_INSERT_LOCATION}}
// Microsoft Visual C++ will insert additional declarations immediately before the
previous line.

#endif

#endif // !defined(_INC_DLGSAREAFILE_H_)
```

```

//



// Module: xdB64.cpp
// Subsystem: X:drive Client Engine (xdEngine.dll)
// Contents: Implementation module for the xdB64 class
//
// -----
// Copyright (c) 1999 by X:drive(tm), Inc.
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// All rights reserved.
// -----
// -----
// 
#include "stdafx.h"
#include "xdB64.h"

#ifndef _DEBUG
#define THIS_FILE
static char THIS_FILE[]=_FILE_;
#endif
#ifndef _VXD_SOURCE_
#include <xdEngine.h>
#define TRACE      DEBUG_DPRINTF
#endif

// Static Member Initializers
//


// The 7-bit alphabet used to encode binary information
CString xdB64::m_sBase64Alphabet =
_T(
"ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789+/"
);

int xdB64::m_nMask[] = { 0, 1, 3, 7, 15, 31, 63, 127, 255 };




// -----
// Method: xdB64()
// Purpose: Standard Constructor
//
xDB64::xDB64 ( void )
{
} // End of xdB64()

//


// Method: ~xDB64()

```

```

// Purpose: Standard destructor
//
xdBase64::~xdBase64()
{
} // End of ~xdBase64()

// -----
// Method: Encode()
// Purpose: Encodes a string
//
CString xdBase64::Encode(LPCTSTR szEncoding, int nSize)
{
    CString sOutput = _T( "" );
    int nNumBits = 6;
    UINT nDigit;
    int lp = 0;

    ASSERT( szEncoding != NULL );
    if( szEncoding == NULL )
        return sOutput;
    m_szInput = szEncoding;
    m_nInputSize = nSize;

    m_nBitsRemaining = 0;
    nDigit = read_bits( nNumBits, &nNumBits, lp );
    while( nNumBits > 0 )
    {
        sOutput += m_sBase64Alphabet[ (int)nDigit ];
        nDigit = read_bits( nNumBits, &nNumBits, lp );
    }
    // Pad with '=' as per RFC 1521
    while( sOutput.GetLength() % 4 != 0 )
    {
        sOutput += '=';
    }
    return sOutput;
} // End of Encode()

// -----
// Method: Decode()
// Purpose: Decodes data
// Notes: The size of the output buffer must not be less than 3/4 the
//           size of the input buffer. For simplicity, make them the same
//           size.
//
int xdBase64::Decode(LPCTSTR szDecoding, LPTSTR szOutput)

```

```

{
    CString sInput;
    int c, lp =0;
    int nDigit;
    CString     strDecode;
    int* pDecode = (int*)strDecode.GetBuffer(256*sizeof(int));

    ASSERT( szDecoding != NULL );
    ASSERT( szOutput != NULL );
    if( szOutput == NULL )
        return 0;
    if( szDecoding == NULL )
        return 0;
    sInput = szDecoding;
    if( sInput.GetLength() == 0 )
        return 0;

    // Build Decode Table
    //
    for( int i = 0; i < 256; i++ )
        pDecode[i] = -2; // Illegal digit
    for( i=0; i < 64; i++ )
    {
        pDecode[ m_sBase64Alphabet[ i ] ] = i;
        pDecode[ m_sBase64Alphabet[ i ] | 0x80 ] = i; // Ignore 8th bit
        pDecode[ '=' ] = -1;
        pDecode[ '=' | 0x80 ] = -1; // Ignore MIME padding char
    }

    // Clear the output buffer
    memset( szOutput, 0, sInput.GetLength() + 1 );

    // Decode the Input
    //
    for( lp = 0, i = 0; lp < sInput.GetLength(); lp++ )
    {
        c = sInput[ lp ];
        nDigit = pDecode[ c & 0x7F ];
        if( nDigit < -1 )
        {
            return 0;
        }
        else if( nDigit >= 0 )
            // i (index into output) is incremented by write_bits()
            write_bits( nDigit & 0x3F, 6, szOutput, i );
    }
}

```

```

        return i;
    } // End of Decode()

// -----
// Method: read_bits()
// Purpose: dunno
//
UINT xdBase64::read_bits(int nNumBits, int * pBitsRead, int& lp)
{
    ULONG lScratch;
    while( ( m_nBitsRemaining < nNumBits ) &&
           ( lp < m_nInputSize ) )
    {
        int c = m_szInput[ lp++ ];
        m_lBitStorage <= 8;
        m_lBitStorage |= (c & 0xff);
        m_nBitsRemaining += 8;
    }
    if( m_nBitsRemaining < nNumBits )
    {
        lScratch = m_lBitStorage << ( nNumBits - m_nBitsRemaining );
        *pBitsRead = m_nBitsRemaining;
        m_nBitsRemaining = 0;
    }
    else
    {
        lScratch = m_lBitStorage >> ( m_nBitsRemaining - nNumBits );
        *pBitsRead = nNumBits;
        m_nBitsRemaining -= nNumBits;
    }
    return (UINT)lScratch & m_nMask[nNumBits];
} // End of read_bits()

// -----
// Method: write_bits()
// Purpose: dunno
//
void xdBase64::write_bits ( UINT nBits, int nNumBits, LPTSTR szOutput, int& i )
{
    UINT nScratch;

    m_lBitStorage = (m_lBitStorage << nNumBits) | nBits;
    m_nBitsRemaining += nNumBits;
    while( m_nBitsRemaining > 7 )
    {
        nScratch = m_lBitStorage >> (m_nBitsRemaining - 8);

```

```
    szOutput[ i++ ] = (TCHAR)(nScratch & 0xFF);
    m_nBitsRemaining -= 8;
}
} // End of write_bits()
```

```

//



// Module: xdBase64.h

// Subsystem: X:drive Client Engine (xdEngine.dll)
// Contents: Declaration module for the xdBase64 class.
//
// -----
// Copyright (c) 1999 by X:drive(tm), Inc.
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// All rights reserved.
// -----
// -----
//



#ifndef _INC_XDBASE64_H_
#define _INC_XDBASE64_H_


#ifndef _VXD_SOURCE_
    #include <xdCString.h>
#endif


#if _MSC_VER >= 1000
#pragma once
#endif // _MSC_VER >= 1000


// -----
// xdBase64 encoder class
//


class xdBase64
{
public:
    xdBase64 ( void );
    virtual ~xdBase64 ( void );

    virtual int          Decode ( LPCTSTR szDecoding, LPTSTR szOutput );
    virtual CString Encode ( LPCTSTR szEncoding, int nSize );


protected:
    void      write_bits ( UINT nBits, int nNumBts, LPTSTR szOutput, int& lp );
    UINT     read_bits ( int nNumBits, int* pBitsRead, int& lp );


protected:
    int           m_nInputSize;
    int           m_nBitsRemaining;
    ULONG         m_lBitStorage;
    LPCTSTR       m_szInput;
};


```

```
static int      m_nMask[];
static CString m_sBase64Alphabet;
};

#endif // !defined(_INC_XDBASE64_H_)
```

/

## // Module: xdGlobals.h

// Subsystem: X:drive

// Contents: Global definitions used throughout the system

//

// -----

// Copyright (c) 1999 by X:drive(tm), Inc.

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// All rights reserved.

// -----

// -----

//

#ifndef \_INC\_XDGLOBALS\_H\_

#define \_INC\_XDGLOBALS\_H\_

#ifdef \_VXD\_SOURCE\_

//

// This HodgePodge helps us to be able to compile all of our code  
// under Ring-3 and Ring-0 without too much modification.

//

#ifndef USE\_NDIS

    #define USE\_NDIS

#endif

#include <vtoolscp.h> // VToolsD main header file

#ifndef LPCTSTR

    typedef char                         TCHAR;

    typedef unsigned char  T UCHAR;

    typedef const TCHAR\*     LPCTSTR;

    typedef TCHAR\*             LPTSTR;

    typedef unsigned char  BYTE;

    typedef BYTE\*             LPBYTE;

    typedef DSKTLSYSTEMTIME  SYSTEMTIME;

    typedef HANDLE            HINSTANCE;

    #define \_T(x)                  (x)

#endif

#ifndef BASED\_CODE

    #define BASED\_CODE

#endif

#ifndef INVALID\_HANDLE\_VALUE

    #define INVALID\_HANDLE\_VALUE (HANDLE)-1

```

#endif

#define _tcsstr      strstr      // Standard unicode mappings
#define _tcslen      strlen
#define _tcscpy      strcpy
#define _tcsrchr     strrchr
#define _tccat       strcat
#define _ttoi        atoi
#define _ttol        atol
#define _tcsrev      strrev
#define _tcschr      strchr
#define _tcsncpy     strncpy
#define _tcsbrk      strpbrk
#define _stprintf    sprintf
#define _tcslwr      strlwr
#define _tcsupr      strupr
#define _tcsicmp     strcmp
#define _tcsncmp     strcasecmp
#define _tcscoll     strcoll
#define _istdigit    isdigit
// #define ASSERT
typedef HANDLE   HWND;
#endif

// -----
// Setup a whole bunch of constants that we can use throughout the systems
//
#define chNL          _T("\n")
#define chCOMMA       _T(',')
#define chDOSSLASH    _T('\\')
#define chUNIXSLASH   _T('/')
#define chQUOTE        _T('"')
#define chDQUOTE       _T("\\\"")
#define chPERIOD      _T('.')
#define chBAR          _T('|')
#define chTAB          _T('t')
#define chCR           _T('\r')
#define chSPACE        _T(' ')
#define chCOLON        _T(':')
#define chSEMICOLON    _T(';')
#define chDASH          _T('-')
#define chPLUS          _T('+')
#define chPERCENT      _T('%')
#define chOPENBRACKET  _T('[')
#define chCLOSEBRACKET _T(']')
#define chNUL           _T('0')

```

```

#define chZERO           _T('0')
#define chONE            _T('1')
#define chTWO            _T('2')
#define chTHREE          _T('3')
#define chFOUR           _T('4')
#define chFIVE           _T('5')
#define chSIX            _T('6')
#define chSEVEN          _T('7')
#define chEIGHT          _T('8')
#define chNINE           _T('9')
#define chOPENPAREN      _T('(')
#define chCLOSEPAREN     _T(')')
#define chAT              _T('@')

#define szNL              _T("\n")
#define szCOMMA           _T(",")
#define szDOSSLASH        _T("\\\\")
#define szUNIXSLASH       _T("/")
#define szQUOTE            _T("'''")
#define szDQUOTE           _T("''")
#define szPERIOD           _T(".")
#define szBAR              _T("|")
#define szTAB              _T("\t")
#define szCR               _T("\r")
#define szSPACE             _T(" ")
#define szCOLON            _T(":")
#define szSEMICOLON        _T(";")
#define szDASH              _T("-")
#define szPLUS              _T("+")
#define szOPENBRACKET      _T("[")
#define szCLOSEBRACKET     _T("]")
#define szAT                _T("@")
#define szEMPTY             _T("''")
#define szCURRENTDIR       _T("..")
#define szPARENTDIR         _T("..")
#define szFTP_DOT           _T("ftp.")
#define szFTP_SLASH         _T("ftp://")
#define szOPENPAREN         _T("(")
#define szCLOSEPAREN        _T(")")

#define XD_CACHE_BASEDIR   _T("xdcache")
#define XD_LOGFILE_NP       _T("xdrive.log")
#define XD_LOGFILE_VXD      _T("xdrivevxd.log")

// -----
// We need to define the scope of values which will be used in the system.

```

```
// They are defined here since we need to read/write these to the registry.  
//  
//  
// General defines  
//  
#define XD_LEN_32           32  
#define XD_LEN_64           64  
#define XD_LEN_128          128  
#define XD_LEN_256          256  
#define XD_LEN_512          512  
#define XD_LEN_1024         1024  
#define XD_LEN_2048         2048  
  
//  
// these program IDs are also the 1st two digits of the registration number  
//  
#define XD_PROGID_XDRIVE 0x53      // {DB2112AD-0000-0000-0053-  
000004281965}  
  
//  
// IN will generate a directory listing and the local file that contains  
// that information will have an extension of `.fnd`. For example, if  
// IN/FND does a directory listing of ftp.microsoft.com\softlib\mslfiles,  
// it will place the raw directory listing in the in the local IN cache  
// directory (which is currently defined as hanging off of the same  
// directory where IN is located) as  
//  
// c:\xdCache\ftp.microsoft.com\root.softlib.mslfiles.ls  
//  
// and the parsed FND formatted data will be placed into  
//  
// c:\xdCache\ftp.microsoft.com\root.softlib.mslfiles.fnd  
//  
// the .fnd file is parsed out to produce the information returned as a  
// result of the FINDFIRST()/FINDNEXT() calls to the NP.  
//  
#define XD_FILEEXT_LS          _T(".ls")  
#define XD_FILEEXT_XDR         _T(".fnd")  
//  
// Here is our Network Provider Name  
//  
#define XD_PROVIDER_NAME        _T("Xdrive")  
#define XD_PROVIDER_NETID       0x00120000
```

#endif // \_INC\_XDGGLOBALS\_H\_

```

//



// Module: xdParseDate.h
// Subsystem: X:drive Tools Library (xdTools.dll)
// Contents: Declaration module for the CParseDate utility class
//
// -----
// Copyright (c) 1999 by X:drive(tm), Inc.
// Portions Copyright (c) 1996-1999 by KnoWare(r), Inc.
// All rights reserved.
// -----
// -----
//



#ifndef _INC_XDPARSEDATE_H_
#define _INC_XDPARSEDATE_H_


#include <xdTokens.h>

class XDTOOLS_PUBLIC CParseDate
{
public:
    CParseDate ( void );
    ~CParseDate ( void );

    BOOL      Parse ( LPCTSTR s );

    int          m_iYear;
    int          m_iMonth;
    int          m_iDay;
    int          m_iHour;
    int          m_iMinute;
    int          m_iSecond;
    TCHAR        m_szDate[64];
    TCHAR        m_szTime[32];
    TCHAR        m_szOrig[64];

private:
    BOOL      isNUM ( LPCTSTR s );
    BOOL      isDOW ( LPCTSTR s );
    xdTokens  m_tokens;
};

#endif

```

```

//



// Module: xdRegistry.h
// Subsystem: X:drive Tools Library (xdTools.dll)
// Contents: Declaration module for the xdRegistry utility class
//
// -----
// Copyright (c) 1999 by X:drive(tm), Inc.
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// All rights reserved.
// -----
// -----
//



#ifndef _INC_XDREGISTRY_H_
#define _INC_XDREGISTRY_H_


#if _MSC_VER >= 1000
#pragma once
#endif // _MSC_VER >= 1000

#include <xdGlobals.h>           // X:drive system wide globals
#include <xdTools.h>             // X:drive Tools Related

//
// xdRegistry
// the registry class encapsulates the regitry functions. You must open
// at least a hive in the constructor. then you can optionally open
// a subkey & read/write information to the registry. All methods will return
// true upon successful completion. false will be returned if an error
// has occurred.
//
class XDTOOLS_PUBLIC xdRegistry
{
public:
    xdRegistry();
    ~xdRegistry();

//
// public interface
//
public:
    BOOL      RegOpenRead ( HKEY hHive, LPCTSTR szSubKey );
    BOOL      RegOpenWrite ( HKEY hHive, LPCTSTR szSubKey );
    BOOL      RegClose ( void );
        BOOL      RegDeleteKey ( HKEY hHive, LPCTSTR szSubKey );
        BOOL      RegDeleteValue ( LPCTSTR szVal );

```

```
    BOOL      RegEnumKey ( int i, LPCTSTR szKeyName, UINT
uiLenWithNull );
    BOOL      RegEnumVal ( int i, LPCTSTR szValName, UINT
uiLenWithNull, LPCTSTR szValData, UINT uiDataLenWithNull );
    BOOL      RegEnumStr ( int i, LPCTSTR szVal, UINT uiLenWithNull );
    BOOL      RegGetStr ( LPCTSTR sName, LPCTSTR szVal, UINT
uiLenWithNull );
    BOOL      RegPutStr ( LPCTSTR sName, LPCTSTR szVal );
    BOOL      RegPutBin ( LPCTSTR sName, BYTE* pBuffer, UINT uiLen );

    BOOL      RegGetNum ( LPCTSTR sName, BOOL& bVal );
    BOOL      RegGetNum ( LPCTSTR sName, WORD& wVal );
    BOOL      RegGetNum ( LPCTSTR sName, DWORD& dwVal );
    BOOL      RegGetNum ( LPCTSTR sName, UINT& uiVal );

    BOOL      RegPutNum ( LPCTSTR sName, DWORD dwVal );

    LONG      RegGetLastError ( void );

private:
    HKEY      m_hKey;      // the current open hive
    LONG       m_lRetCode;   // the last return code
}; // End of xdRegistry

#endif // _INC_XDREGISTRY_H_
```

```
//  
  
// Module: xdTokens.h  
// Subsystem: X:drive Tools Library (xdTools.dll)  
// Contents: Declaration module for xdTokens utility class  
//  
// -----  
// Copyright (c) 1999 by X:drive(tm), Inc.  
// Portions Copyright (c) 1996-1999 by KnoWare(r), Inc.  
// All rights reserved.  
// -----  
// -----  
//  
#ifndef _INC_XDTOKENS_H_  
#define _INC_XDTOKENS_H_  
  
#if _MSC_VER >= 1000  
#pragma once  
#endif // _MSC_VER >= 1000  
  
#include <xdGlobals.h>           // X:drive system wide globals  
#include <xdTools.h>             // X:drive Tools Related  
  
#define XD_MAX_TOKENS 1024  
  
//-----  
// xdTokens  
// This class is a big worker class. its used to parse strings into  
// tokens or substrings. Strings are parsed by supplying a string of  
// characters which will be used to parse out the string.  
//  
class XDTOOLS_PUBLIC xdTokens  
{  
public:  
    xdTokens(LPCTSTR pTokens = NULL);  
    ~xdTokens();  
  
    //  
    // Public Interface  
    //  
    public:  
        int Parse(int iNumToParse, LPCTSTR pString, LPCTSTR  
pTokens=NULL);  
        int Parse(LPCTSTR pString, LPCTSTR pTokens=NULL);  
        operator[](int iIndex);
```

```
//  
// Private Members  
//  
private:  
    LPCTSTR      *m_pTok;  
    int          m_iNumParsed;  
    LPTSTR       m_szWorkString;  
    LPTSTR       m_szTokens;  
    LPTSTR       m_pWorkString;  
}; // End of xdTokens  
  
#endif // _INC_XDTOKENS_H_
```

```

//



// Module: xdTools.h
// Subsystem: X:drive Tools Library (xdTools.dll)
// Contents: Main header file for the xdTools library
//
// -----
// Copyright (c) 1999 by X:drive(tm), Inc.
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// All rights reserved.
// -----
// -----
//



#ifndef _INC_XDTOOLS_H_
#define _INC_XDTOOLS_H_


#if _MSC_VER >= 1000
#pragma once
#endif // _MSC_VER >= 1000

#include <xdGlobals.h>           // X:drive system wide globals
#ifndef _VXD_SOURCE_
#include <xdCString.h>
#endif
#pragma warning (disable : 4100)
#pragma warning (disable : 4201)

//


// The following code block will insure the proper resolution of any
// API functions (and classes) which are exposed from the XDTOOLS library.
// When compiling the XDTOOLS library source code, make sure that the
// following #define is defined in the project settings (both debug & release).
// This will cause any classes and/or API functions defined as to
// be exported to the LIB file. If you are USING the library by linking to
// the XDTOOLS.LIB or XDTOOLSD.LIB import libraries, then ignore the
// following #define's for
//
#ifndef _XDTOOLS_SOURCE_
    #define XDTOOLS_PUBLIC __declspec( dllexport )
#else
    #define XDTOOLS_PUBLIC __declspec( dllimport )
#endif // _XDTOOLS_SOURCE_


//


// If we are debugging & we trap an exception, we will display it
// in a message box, otherwise in release mode, we wont.

```

```

// -----
#ifndef _DEBUG
    #define XDTRACE(x) AfxMessageBox(x)
#else
    #define XDTRACE(x) TRACE0(x)
#endif

// -----
// XDDATE API (Date Functions)
//
XDTOOLS_PUBLIC int XDDATE_MonthNum ( LPTSTR szMonth );

// -----
// XDSTR API (String Functions)
//
XDTOOLS_PUBLIC LPTSTR      XDSTR_Squish ( LPTSTR p );
XDTOOLS_PUBLIC LPTSTR      XDSTR_StripChar ( LPTSTR p, TCHAR c );
XDTOOLS_PUBLIC LPTSTR      XDSTR_DirSlashAdd ( LPTSTR sz, TCHAR c );
XDTOOLS_PUBLIC LPTSTR      XDSTR_DirSlashRemove ( LPTSTR sz, TCHAR c
);
XDTOOLS_PUBLIC LPTSTR      XDSTR_TrimRight ( LPTSTR );
XDTOOLS_PUBLIC LPTSTR      XDSTR_TrimLeft ( LPTSTR );
XDTOOLS_PUBLIC LPTSTR      XDSTR_Trim ( LPTSTR );
XDTOOLS_PUBLIC BOOL XDAPI_CreatePath ( LPCTSTR ); // calls
CreateDirectory() to make a path.

// -----
// Stuff for message boxes
//
#ifndef _VXD_SOURCE_
    int      XDTOOLS_PUBLIC XD_MSG ( LPCTSTR szText, UINT
uiMsgFlags );
    int      XDTOOLS_PUBLIC XD_QUESTION ( LPCTSTR szText, UINT
uiMsgFlags );
    LPCTSTR XDTOOLS_PUBLIC XD_TEXT ( HINSTANCE h, UINT uiResId );
// LOADS A RESOURCE!
    BOOL XD_DoHelp ( LPHELPINFO );
    void   XD_DoHelpContext ( CWnd* );
#endif

// 
// the calling object needs to supply the resource
// handle for loading the string. So set up a stupid macro
// that will automatically supply this!
//
#define XD_LOADSTRING(x)     XD_TEXT(AfxGetResourceHandle(),(x))

```

```

//  

// DEBUGGING STUFF  

//  

#define CATCH_MSG_T("Caught Exception in File %s, Line %d\n\n")
#ifndef _VXD_SOURCE_
    #define XDCATCH dprintf(CATCH_MSG, _T(FILE_), _LINE_)
#else
    #define XDCATCH { CString s; s.Format(CATCH_MSG, _T(FILE_),  

        _LINE_); AfxMessageBox(s); }
#endif

//  

// Ring 0 File I/O  

//  

#ifndef _VXD_SOURCE_
#define GENERIC_READ          (0x80000000) /* from WINNT.H */  

#define GENERIC_WRITE         (0x40000000) /* from WINNT.H */  

#define CREATE_NEW             1  

#define CREATE_ALWAYS           2  

#define OPEN_EXISTING           3  

#define OPEN_ALWAYS              4  

#define TRUNCATE_EXISTING        5  

#define FILE_SHARE_READ          0x00000001  

#define FILE_SHARE_WRITE         0x00000002  

#define FILE_SHARE_DELETE        0x00000004 // not supported

HANDLE CreateFile ( LPCTSTR lpFileName,      // pointer to name of the file
                    DWORD dwDesiredAccess, // access (read-
write) mode
                    DWORD dwShareMode,      // share mode
                    void* lpSecAtt,           //  

pointer to security attributes
create
attributes
                    DWORD dwCreateFlags,      // how to
                    DWORD dwFlagsAndAttributes, // file
                    HANDLE);  

BOOL CloseHandle ( HANDLE hFile );  

BOOL ReadFile ( HANDLE hFile,                // handle of file to read
                void* lpBuffer,           // pointer to buffer that receives data
                DWORD nNumberOfBytesToRead, // number of bytes to
read
                DWORD* lpNumberOfBytesRead, // pointer to number of
bytes read
                void* lpOverlapped); // pointer to structure for data

```

```
BOOL ReadFileLine ( HANDLE hFile,           // handle of file to read
                    BYTE* lpBuffer,          // pointer to
                    buffer that receives data
                    DWORD dwBytesToRead,    // number of bytes to
                    read
                    DWORD* dwBytesRead,      // pointer to
                    number of bytes read
                    DWORD* dwOffset);       // pointer to structure
                    for data

BOOL WriteFile ( HANDLE hFile, LPCTSTR lpBuffer, DWORD dwBytesToWrite,
                 DWORD* pBytesWritten, void* p);

DWORD     GetFileSize ( HANDLE hFile, DWORD* pdwHigh );
#endif

#endif // !defined(_INC_XDTOOLS_H_)
```

```

//



// Module: xdEngine.h
// Subsystem: X:drive Client Engine (xdEngine.dll)
// Contents: Main include file for the xdEngine subsystem
//
// -----
// Copyright (c) 1999 by X:drive(tm), Inc.
// Portions Copyright (c) 1996-1999 by KnoWare(r), Inc.
// All rights reserved.
// -----
// -----
// 
#ifndef _INC_XDRIVE_ENGINE_H_
#define _INC_XDRIVE_ENGINE_H_


#if _MSC_VER >= 1000
#pragma once
#endif // _MSC_VER >= 1000

#pragma warning (disable : 4100)
#pragma warning (disable : 4201)

#ifdef _XDENGINE_SOURCE_
    #define XDAPI_PUBLIC __declspec( dllexport )
#else
    #define XDAPI_PUBLIC __declspec( dllimport )
#endif // _XDENGINE_SOURCE_

#pragma pack(1) // byte pack this thing!

#include <xdGlobals.h>

// -----
// XD_DIRENTRY - directory listing item
//
//      The following structure is used to hold an object in the file listing
// file. Xdrive will generate the file list for the directory and store it
// in the cache directory. That file will contain
// a list of record structures of this type. The .mnd file is generated
// based upon the FTP server specific format in the .idx file in the same
// cache directory.
//
typedef struct _xd_direntry_
{
    USHORT           cb;           // class size, MUST BE FIRST!!!!

```

```

        DWORD      dwFileAttributes;
        FILETIME   ftCreationTime;
        FILETIME   ftLastAccessTime;
        FILETIME   ftLastWriteTime;
        DWORD      nFileSizeHigh;
        DWORD      nFileSizeLow;
        TCHAR      cFileName[ XD_LEN_512 ];
        TCHAR      m_szObPerms [ XD_LEN_32 + 1 ];
        BYTE       m_bObOwnerPerms[4];
        BYTE       m_bObGroupPerms[4];
        BYTE       m_bObWorldPerms[4];
} XD_DIRENTRY, * LPXD_DIRENTRY;

#pragma pack()

//
// Return codes
//
typedef UINT XD_RETCODE;

#define XD_SUCCESS          (int)0
#define XD_CANCEL           (int)1
#define XD_ERR_CONNECTFAILED (int)2      // socket connect failed
#define XD_ERR_LOGINFAILED  (int)3      // bad username/pwd
#define XD_ERR_CONNECTREFUSED (int)5     // socket connect refused
#define XD_ERR_CANTRESOLVEHOST (int)6    // cant resolve host
#define XD_ERR_SERVERUPGRADING (int)7    // upgrading our servers

#define XD_ERR_OTHER         (int)-1

//
// The following constants are used in the notification structure.
//
typedef enum
{
    XD_NOTIFY_IDLE          = 0,      // nothing happening here
    XD_NOTIFY_STATUS_MSG    = 1000,    // status msg
    XD_NOTIFY_XFERDATA_DN   = 1001,    // downloading
    XD_NOTIFY_XFERDATA_UP   = 1002,    // uploading
    XD_NOTIFY_QUOTA          = 1003,    // Update the
quota
    XD_NOTIFY_START          = 1004,    // Start an
operation
    XD_NOTIFY_STOP           = 1005,    // Stop an operation
} XD_NOTIFY_CODE;

```

```

// -----
// XD_NOTIFY - This is our notification structure. The http engine
// will use this structure to pass status information back to the
// invoking method.
//
#pragma pack(1)

typedef struct _xd_notification_
{
    int             m_iNotifyType;
    TCHAR          m_szMessage [ 1024 + sizeof(TCHAR) ];

    //
    // used for send/receive
    //
    ULONG          m_dwStartTime;           // GetTickCount()/1000
    ULONG          m_dwCurrentTime;        // GetTickCount()/1000

    DWORD          m_dwCurrentBytes;
    DWORD          m_dwTotalBytes;

    TCHAR          m_szLocalFileName [ MAX_PATH + sizeof(TCHAR) ];
    TCHAR          m_szRemoteFileName [ MAX_PATH + sizeof(TCHAR) ];
} XD_NOTIFY, *LPXD_NOTIFY;
#pragma pack()
#define XD_NOTIFY_MAX 50

#endif // _INC_XDRIVE_ENGINE_H_

```

```

//



// Module: tdimshtbl.h
// Subsystem: X:drive Client Engine (xdEngine.dll)
// Contents: TDI Error table.

// -----
// Copyright (c) 1999 by X:drive(tm), Inc.
// Portions Copyright (c) 1996-1999 by River Front Software
// All rights reserved.
// -----
// -----
//



#ifndef __TDIMSGTBL_H
#define __TDIMSGTBL_H


typedef struct
{
    TDI_STATUS Status;
    int          WinStatus;
    char        *szMsg;
} INETTDIMSG;

INETTDIMSG TdiMsgTbl[] =
{
    {TDI_SUCCESS, ERROR_SUCCESS, "TDI Success"},
    {TDI_NO_RESOURCES, ERROR_BAD_COMMAND, "No resources."},
    {TDI_ADDR_IN_USE, ERROR_BAD_COMMAND, "Address already in
use."},
    {TDI_BAD_ADDR, ERROR_BAD_COMMAND, "Address given is bad."},
    {TDI_NO_FREE_ADDR, ERROR_BAD_COMMAND, "No addresses
available."},
    {TDI_ADDR_INVALID, ERROR_BAD_COMMAND, "Address object is
invalid."},
    {TDI_ADDR_DELETED, ERROR_BAD_COMMAND, "Address object was
deleted."},
    {TDI_BUFFER_OVERFLOW, ERROR_BAD_COMMAND, "Buffer
overflowed."},
    {TDI_BAD_EVENT_TYPE, ERROR_BAD_COMMAND, "Bad event type."},
    {TDI_BAD_OPTION, ERROR_BAD_COMMAND, "Bad option or length."},
    {TDI_CONN_REFUSED, ERROR_BAD_COMMAND, "Connection was
refused."},
    {TDI_INVALID_CONNECTION, ERROR_BAD_COMMAND, "Invalid
connection."},
}

```

```

        {TDI_ALREADY_ASSOCIATED, ERROR_BAD_COMMAND, "Connection
already associated."},
        {TDI_NOT_ASSOCIATED, ERROR_BAD_COMMAND, "Connection not
associated."},
        {TDI_CONNECTION_ACTIVE, ERROR_BAD_COMMAND, "Connection
is still active."},
        {TDI_CONNECTION_ABORTED, ERROR_BAD_COMMAND, "Connection
was aborted."},
        {TDI_CONNECTION_RESET, ERROR_BAD_COMMAND, "Connection was
reset."},
        {TDI_TIMED_OUT, ERROR_BAD_COMMAND, "Connection timed out."},
        {TDI_GRACEFUL_DISC, ERROR_BAD_COMMAND, "Received a graceful
disconnect."},
        {TDI_NOT_ACCEPTED, ERROR_BAD_COMMAND, "Data not accepted."},
        {TDI_MORE_PROCESSING, ERROR_BAD_COMMAND, "More processing
required."},
        {TDI_INVALID_STATE, ERROR_BAD_COMMAND, "TCB in an invalid
state."},
        {TDI_INVALID_PARAMETER, ERROR_BAD_COMMAND, "An invalid
parameter."},
        {TDI_DEST_NET_UNREACH, ERROR_BAD_COMMAND, "Destination net
is unreachable."},
        {TDI_DEST_HOST_UNREACH, ERROR_BAD_COMMAND, "Dest. host is
unreachable."},
        {TDI_DEST_UNREACHABLE, ERROR_BAD_COMMAND, "Dest. is
unreachable. "},
        {TDI_DEST_PROT_UNREACH, ERROR_BAD_COMMAND, "Destination
protocol is unreachable."},
        {TDI_DEST_PORT_UNREACH, ERROR_BAD_COMMAND, "Dest. port is
unreachable."},
        {TDI_INVALID_QUERY, ERROR_BAD_COMMAND, "Invalid query type
specified."},
        {TDI_REQ_ABORTED, ERROR_BAD_COMMAND, "Request was aborted
for some reason."},
        {TDI_BUFFER_TOO_SMALL, ERROR_BAD_COMMAND, "Buffer was too
small."},
        {TDI_CANCELLED, ERROR_BAD_COMMAND, "The request was
cancelled."},
        {TDI_BUFFER_TOO_BIG, ERROR_BAD_COMMAND, "Invalid request."},
        {ERROR_SEM_TIMEOUT, ERROR_SEM_TIMEOUT, "Timed out."},
        {TDI_PENDING, ERROR_BAD_COMMAND, "Pending"}
    };

#endif

```

```

//



// Module: tdisock.h
// Subsystem: X:drive Client Engine (xdEngine.dll)
// Contents: TDI Socket header file.
//
// -----
// Copyright (c) 1999 by X:drive(tm), Inc.
// Portions Copyright (c) 1996-1999 by River Front Software
// All rights reserved.
// -----
// -----
//



#ifndef __TDISOCK_H
#define __TDISOCK_H


#define TDISOCK_TIMEOUT      15000
#define WSADESCRIPTION_LEN   256
#define WSASYS_STATUS_LEN    128
typedef short SHORT;
typedef unsigned short USHORT;
typedef unsigned short ushort;
typedef unsigned int uint;
typedef unsigned long ulong;
typedef unsigned long ULONG;
typedef void (*CTEReqCmpltRtn)(void *Context, long FinalStatus, unsigned int
ByteCount);
typedef unsigned char uchar;
typedef struct WSADATA {
    WORD          wVersion;
    WORD          wHighVersion;
    char          szDescription[WSADESCRIPTION_LEN+1];
    char          szSystemStatus[WSASYS_STATUS_LEN+1];
    unsigned short iMaxSockets;
    unsigned short iMaxUdpDg;
    char FAR *    lpVendorInfo;
} WSADATA;

typedef WSADATA FAR *LPWSADATA;

#define USE_NDIS  1

#include <vtools.h>

```

```

#include <crtl.h>

#undef USE_NDIS

#include <tdi.h>
#include <vxdsvc.h>
#include <tdivxd.h>
#include <tdistat.h>

#undef VTDI_Device_ID
#include <vtdi.h>

#define MAKELONG(a, b) ((LONG)((WORD)(a)) | ((DWORD)((WORD)(b))) << 16)
#define LOWORD(l) ((WORD)(l))
#define HIWORD(l) ((WORD)((DWORD)(l) >> 16) & 0xFFFF)
#define LOBYTE(w) ((BYTE)(w))
#define HIBYTE(w) ((BYTE)((WORD)(w) >> 8) & 0xFF)

/*
 * Structures returned by network data base library, taken from the
 * BSD file netdb.h. All addresses are supplied in host order, and
 * returned in network order (suitable for use in system calls).
 */

struct hostent {
    char  FAR * h_name;      /* official name of host */
    char  FAR * FAR * h_aliases; /* alias list */
    short h_addrtype;        /* host address type */
    short h_length;          /* length of address */
    char  FAR * FAR * h_addr_list; /* list of addresses */
#define h_addr h_addr_list[0] /* address, for backward compat */
};

***** Wait for semaphore flags */
#define WAIT_SEMA_FLAGS 0 //BLOCK_SVC_INTS | BLOCK_POLL

***** Macro to call wait on semaphore function */
#define SEMAPHORE_WAIT( hSem, nTimeout ) \
    WaitOnSemaphore( s, hSem, #hSem, nTimeout )

***** Checks for valid TDI status */
#define TDI_CHECKSTATUS(s) if( (s) != TDI_SUCCESS ) \

```

```

        {
        \
        errdebug(
DBG_log("ERROR - File: %s Line:%d TDI [%d] - %s\n", \
FILE__,
LINE__, (s), MapTdiToString(s)); );
        \
        goto Exit;
        \
    }

/***** Destroys a semaphore */
#define SEMAPHORE_SAFE_DESTROY(hSem) \
if (hSem) \
{
    \
    vbsdebug( DBG_log("Destroy Semaphore %s", #hSem); ); \
    UtilSemDestroy(hSem); \
    hSem = 0; \
}

/***** Signals a semaphore */
#define SEMAPHORE_SAFE_SIGNAL(hSem) \
if (hSem) \
{
    \
    vbsdebug( DBG_log("*** Signal Semaphore %s", #hSem); ); \
    \
    vbsdebug( DBG_log_hex_long( hSem ); ); \
    \
    Signal_Semaphore_No_Switch( hSem );
}
else \
{
    \
    vbsdebug( DBG_log("*** NO SEMAPHORE TO SIGNAL %s", \
#hSem); );
}

/*
 * Basic system type definitions, taken from the BSD file sys/types.h.
 */
typedef unsigned char u_char;
typedef unsigned short u_short;
typedef unsigned int u_int;
typedef unsigned long u_long;

```

```

/*
 * Constants and structures defined by the internet system,
 * Per RFC 790, September 1981, taken from the BSD file netinet/in.h.
 */

/*
 * Protocols
 */
#define IPPROTO_IP      0      /* dummy for IP */
#define IPPROTO_ICMP    1      /* control message protocol */
#define IPPROTO_IGMP    2      /* internet group management protocol */
#define IPPROTO_GGP     3      /* gateway^2 (deprecated) */
#define IPPROTO_TCP     6      /* tcp */
#define IPPROTO_PUP     12     /* pup */
#define IPPROTO_UDP     17     /* user datagram protocol */
#define IPPROTO_IDP     22     /* xns idp */
#define IPPROTO_ND      77     /* UNOFFICIAL net disk proto */

#define IPPROTO_RAW     255    /* raw IP packet */
#define IPPROTO_MAX     256

```

```

/*
 * Port/socket numbers: network standard functions
 */
#define IPPORT_ECHO      7
#define IPPORT_DISCARD   9
#define IPPORT_SYSTAT    11
#define IPPORT_DAYTIME   13
#define IPPORT_NETSTAT   15
#define IPPORT_FTP       21
#define IPPORT_TELNET    23
#define IPPORT_SMTP      25
#define IPPORT_TIMESERVER 37
#define IPPORT_NAMESERVER 42
#define IPPORT_WHOIS     43
#define IPPORT_MTP       57

```

```

/*
 * Port/socket numbers: host specific functions
 */
#define IPPORT_TFTP      69
#define IPPORT_RJE       77
#define IPPORT_FINGER    79
#define IPPORT_TTYLINK   87

```

```

#define IPPORT_SUPDUP      95

/*
 * UNIX TCP sockets
 */
#define IPPORT_EXECSERVER  512
#define IPPORT_LOGINSERVER 513
#define IPPORT_CMDSERVER   514
#define IPPORT_EFSSERVER   520

/*
 * UNIX UDP sockets
 */
#define IPPORT_BIFFUDP     512
#define IPPORT_WHOISERVER  513
#define IPPORT_ROUTEISERVER 520
                           /* 520+1 also used */

/*
 * Ports < IPPORT_RESERVED are reserved for
 * privileged processes (e.g. root).
 */
#define IPPORT_RESERVED    1024

/*
 * Link numbers
 */
#define IMPLINK_IP         155
#define IMPLINK_LOWEXPER   156
#define IMPLINK_HIGHEXPER  158

/*
 * Internet address (old style... should be updated)
 */
struct in_addr {
    union {
        struct { u_char s_b1,s_b2,s_b3,s_b4; } S_un_b;
        struct { u_short s_w1,s_w2; } S_un_w;
        u_long S_addr;
    } S_un;
#define s_addr S_un.S_addr
                           /* can be used for most tcp & ip code */
#define s_host S_un.S_un_b.s_b2
                           /* host on imp */
#define s_net  S_un.S_un_b.s_b1
                           /* network */

```

```

#define s_imp S_un.S_un_w.s_w2
/* imp */
#define s_impno S_un.S_un_b.s_b4
/* imp # */
#define s_lh S_un.S_un_b.s_b3
/* logical host */
};

#define htons(host) ( (((host) & 0xff) << 8) | ((host) >> 8) )
ULONG htonl( ULONG hostlong );

/*
 * Definitions of bits in internet address integers.
 * On subnets, the decomposition of addresses to host and net parts
 * is done according to subnet mask, not the masks here.
 */
#define IN_CLASSA(i) (((long)(i) & 0x80000000) == 0)
#define IN_CLASSA_NET 0xff000000
#define IN_CLASSA_NSHIFT 24
#define IN_CLASSA_HOST 0x00fffff
#define IN_CLASSA_MAX 128

#define IN_CLASSB(i) (((long)(i) & 0xc0000000) == 0x80000000)
#define IN_CLASSB_NET 0xffff0000

// end first 30 pages aj

```

```

int iMax = i;
CString* pArray = new CString[iMax];
i=0;
while (r1.RegEnumKey(i++,szVal,dwCnt))
    pArray[i-1] = szVal;
r1.RegClose();
for (i=0; i<iMax; i++)
{
    CString str = pArray[i];
    CString strTmp;
    strTmp.Format(_T("%s\\%s"), (LPCTSTR)szSubKey,
(LPCTSTR)str);
    r1.RegDeleteKey(hHive,strTmp);
}
delete[] pArray;

}

```

```

        //
        // then Delete the key
        //
        m_lRetCode = ::RegDeleteKey ( hHive, szSubKey );
#endif

#ifndef _VXD_SOURCE_
    }
    catch(...)
    {
        XDCATCH;
        bOK = FALSE;
    }
#endif

//
// bOK is TRUE if ERROR_SUCCESS was returned
//
bOK = (ERROR_SUCCESS == m_lRetCode);

return bOK;
} // End of RegDelete()

// -----
// Method: RegClose()
// Purpose: the the registry is open, close it.
//
BOOL xdRegistry::RegClose ( )
{
    BOOL bOK = TRUE;

#ifndef _VXD_SOURCE_
    try
    {
#endif

        if( m_hKey != NULL )
            ::RegCloseKey ( m_hKey );

#ifndef _VXD_SOURCE_
    }
    catch(...)
    {
        XDCATCH;
        bOK = FALSE;
    }

```

```

#endif

//
// unconditionally null the key
//
m_hKey = NULL;

return bOK;
} // End of RegClose()

// -----
// Method: RegEnumStr()
// Purpose: enumerates subkeys for a key. i is the index to get
//
BOOL xdRegistry::RegEnumStr ( int i, LPCTSTR szValue, UINT uiLenWithNull )
{
    BOOL bOK = TRUE;
    DWORD dwIdx = i;
    DWORD dwSize = (DWORD) uiLenWithNull;
    LPBYTE pValue = (LPBYTE) szValue;

    //
    // Make sure that the registry is open
    //
    if (m_hKey == NULL)
        return FALSE;

#ifndef _VXD_SOURCE_
    try
    {
#endif
    #endif
    //
    // initialize the string to be empty
    //
    memset ( pValue, 0, uiLenWithNull );

#ifdef _VXD_SOURCE_
    m_lRetCode = ::RegEnumKey (      m_hKey,           // 
hive/key
                                         dwIdx,
                                         // index of the key to get
                                         (LPTSTR)pValue,
                                         // key name will go here
                                         dwSize);
                                         // the size of the buffer
#else
#endif

```

```

#define _UNICODE
    CString sTmp;
    TCHAR szBuf = (BYTE*)sTmp.GetBuffer(512);
    m_lRetCode = ::RegEnumKeyA (m_hKey,           // hive/key
                                dwIdx,          // index of the key to get
                                (char*)buf,      // name will go here
                                dwSize);        // the size of the buffer
    if (_tcsncpy((LPTSTR)szValue,fred)) {
        m_lRetCode = ::RegEnumKey (   m_hKey,           // hive/key
                                    dwIdx,          // index of the key to get
                                    (LPTSTR)pValue, // key name will go here
                                    dwSize);        // the size of the buffer
    }
}

bOK = (ERROR_SUCCESS == m_lRetCode);
if (bOK != FALSE)
{
    // terminate the string...ensure that we dont go past
    // the max length of the string!
    ((LPTSTR)szValue) [ min(dwSize,uiLenWithNull) ] = 0;
}

#endif _VXD_SOURCE_
}
catch(...)
{
    XDCATCH;
    bOK = FALSE;
}
#endif

return bOK;
} // End of RegEnumStr()

```

```

// -----
// Method: RegGetStr()
// Purpose: retrieves a string value from the registry. NOTE: The length
//          of the string MUST include space for the NULL terminator since
//          this character IS read from the registry. So, if you want to
//          read 'ABCD' from the registry, supply a uiLenWithNull of five(5).
//
// BOOL xdRegistry::RegGetStr ( LPCTSTR szName, LPCTSTR szValue, UINT
uiLenWithNull )
{
    BOOL bOK = TRUE;
    DWORD dwType      = 0;
    DWORD dwSize= (DWORD) uiLenWithNull;
    LPBYTE pValue= (LPBYTE) szValue;

    //
    // Make sure that the registry is open
    //
    if (m_hKey == NULL)
        return FALSE;

#ifndef _VXD_SOURCE_
    try
    {
#endif
    // initialize the string to be empty
    //
    memset ( pValue, 0, uiLenWithNull );

#ifndef _VXD_SOURCE_
    m_lRetCode = ::RegQueryValueEx (m_hKey,                      // hive/key
                                    (LPTSTR)szName,   // value name
                                    NULL,
                                    // reserved
                                    &dwType,
                                    pValue,
                                    &dwSize);
    // # to fetch (WITH NULL)
#else
    #ifdef _UNICODE
        char sShort[512];

```

```

char sDefault[512];
char buf[512];
BOOL b;
*sDefault = *sShort=0;
WideCharToMultiByte ( CP_ACP, 0, szName, -1, sShort, 512,
sDefault, &b );
m_lRetCode = ::RegQueryValueExA ( m_hKey, // hive/key
sShort,
// value name
0,
// reserved
&dwType,
// the REG_* type

(LPBYTE)buf, // pointer to the storage area
&dwSize);

// # to fetch (WITH NULL)
CString fred(buf);
_tcscpy((LPTSTR)szValue,fred);
#else
m_lRetCode = ::RegQueryValueEx ( m_hKey, // hive/key
szName,
// value name
0,
// reserved
&dwType,
// the REG_* type
pValue,
// pointer to the storage area
&dwSize);

// # to fetch (WITH NULL)
#endif
#endif

bOK = (ERROR_SUCCESS == m_lRetCode);
if( bOK == TRUE )
{
//
// make sure that it was a string value which was returned.
// If not, Delete the entry so we can regen it as a string
//
if(REG_SZ != dwType)
::RegDeleteValue ( m_hKey, (LPTSTR)szName );

//
// terminate the string...ensure that we dont go past

```

```

        // the max lenth of the string!
        //
        ((LPTSTR)szValue) [ min(dwSize,uiLenWithNull) ] = 0;
    }
#endif _VXD_SOURCE_
}
catch(...)
{
    XDCATCH;
    bOK = FALSE;
}
#endif

return bOK;
} // End of RegGetStr()

// -----
// Method: RegPutStr()
// Purpose: write the information to the registry (write the NULL TOO).
//
BOOL xdRegistry::RegPutStr ( LPCTSTR szName, LPCTSTR szValue )
{
    BOOL bOK = TRUE;

    //
    // Make sure that the registry is open
    //
    if (m_hKey == NULL)
        return FALSE;

#ifndef _VXD_SOURCE_
    try
    {
#endif

#ifndef _VXD_SOURCE_
    //
    // move everything into a temp buffer so that we can ensure
    // the existance of a NULL byte on the end of the string
    //
    CString sTmp;
    LPTSTR szBuf = sTmp.GetBuffer(512);
    memset ( szBuf, 0, 512 );
    memcpy ( szBuf, szValue, min(sTmp.GetAllocLength()-1,strlen(szValue)) );
);

```

```

//
// remember...always write the NULL byte too!
//
UINT uiLenWithNull = strlen(szBuf) + 1;
m_lRetCode = ::RegSetValueEx( m_hKey, (LPTSTR)szName, 0,
REG_SZ,
(LPBYTE)szBuf, uiLenWithNull );
#else
#define _UNICODE
char sShort[512];
char sShortVal[512];
char sDefault[512];
BOOL b;
*sDefault = *sShort=0;
WideCharToMultiByte( CP_ACP, 0, szName, -1, sShort, 512,
sDefault, &b );
WideCharToMultiByte( CP_ACP, 0, szValue, -1, sShortVal, 512,
sDefault, &b );
m_lRetCode = ::RegSetValueExA( m_hKey, sShort, 0, REG_SZ,
(LPBYTE)
sShortVal, strlen(sShortVal)+1 );
#else
CString sTmp;
LPTSTR szBuf = (LPTSTR)sTmp.GetBuffer(1024);
memset( szBuf, 0, 1024 );
memcpy( szBuf, szValue, min(1023,_tcslen(szValue))*sizeof(TCHAR) );
szBuf[_tcslen(szValue)] = 0;

//
// remember...always write the NULL byte too!
//
UINT uiLenWithNull = _tcslen(szBuf) + 1;
m_lRetCode = ::RegSetValueEx( m_hKey, szName, 0, REG_SZ,
(LPBYTE)
szBuf, uiLenWithNull );
#endif
#endif
bOK = (ERROR_SUCCESS == m_lRetCode);

#ifndef _VXD_SOURCE_
}
catch(...)

```

```

    {
        XDCATCH;
        bOK = FALSE;
    }
#endif

    return bOK;
} // End of RegPutStr()

// -----
// Method: RegGetNum()
// Purpose: Retrieves a number from the registry. there are various
//           overloads for different types.
//
BOOL xdRegistry::RegGetNum(LPCTSTR sName, DWORD& dwValue)
{
    BOOL bOK = TRUE;
    CString      sTmp;
    LPTSTR      szBuf = sTmp.GetBuffer(XD_LEN_64);
    memset( szBuf, 0, XD_LEN_64 );
    DWORD      dwType = 0;
    DWORD      dwSize = XD_LEN_64-1;

    //
    // Make sure that the registry is open
    //
    if (m_hKey == NULL)
        return FALSE;

#ifndef _VXD_SOURCE_
    try
    {
#endif

#ifndef _VXD_SOURCE_
    bOK = RegGetStr( sName, szBuf, sTmp.GetAllocLength()-1 );
    if ( bOK == TRUE )
        dwValue = (DWORD)atol((LPTSTR)szBuf);
#else
    #ifdef _UNICODE
        char sShort[512];
        char sDefault[512];
        char bufTmp[512];
        BOOL b=0;
        *sDefault = *sShort=0;

```

```

        WideCharToMultiByte      ( CP_ACP, 0, sName, -1, sShort, 512,
sDefault, &b );
        m_lRetCode = ::RegQueryValueExA ( m_hKey,           // hive/key
                                         sShort,
                                         // value name
                                         0,
                                         // reserved
                                         &dwType,
                                         // the REG_* type
                                         (LPBYTE)bufTmp, // pointer to the storage area
                                         &dwSize);
        // # to fetch (WITH NULL)
        bOK = (ERROR_SUCCESS == m_lRetCode);
        if ( bOK == TRUE )
        {
            if ( dwType == REG_SZ )
                dwValue = (DWORD)atol(bufTmp);
        }
        #else
        m_lRetCode = ::RegQueryValueEx ( m_hKey,
                                         sName,
                                         0,
                                         &dwType,
                                         (BYTE*)szBuf,
                                         &dwSize );
        bOK = (ERROR_SUCCESS == m_lRetCode);
        if ( bOK == TRUE )
        {
            if ( dwType == REG_SZ )
                dwValue = (DWORD)_ttoi((LPTSTR)szBuf);
            if ( dwType == REG_DWORD )
                dwValue = * ((DWORD*)szBuf);
        }
        #endif
    #endif

#endif _VXD_SOURCE_
}
catch(...)
{
    XDCATCH;
}

```

```

        bOK = FALSE;
    }
#endif

    return bOK;
} // End of RegGetNum()

// -----
// Method: RegGetNum()
// Purpose: Retrieves a number from the registry. UINT version
//
BOOL xdRegistry::RegGetNum(LPCTSTR sName, UINT& uiValue)
{
    DWORD      dwValue = uiValue;
    BOOL bOK = RegGetNum(sName,dwValue);

    uiValue = (UINT) dwValue;

    return bOK;
} // End of RegGetNum()

// -----
// Method: RegGetNum()
// Purpose: Retrieves a number from the registry. BOOL version
//
BOOL xdRegistry::RegGetNum(LPCTSTR sName, BOOL& bValue)
{
    DWORD      dwValue = bValue;
    BOOL bOK = RegGetNum(sName,dwValue);

    bValue = (BOOL) dwValue;

    return bOK;
} // End of RegGetNum()

// -----
// Method: RegGetNum()
// Purpose: Retrieves a number from the registry. WORD VERSION.
//
BOOL xdRegistry::RegGetNum(LPCTSTR sName, WORD& wValue)
{
    DWORD      dwValue = wValue;
    BOOL bOK = RegGetNum(sName,dwValue);

    wValue = (WORD) dwValue;
}

```

```

        return bOK;
    } // End of RegGetNum()

// -----
// Method: RegPutNum()
// Purpose: writes a numeric value to the registry.
//
BOOL xdRegistry::RegPutNum(LPCTSTR sName, DWORD dwValue)
{
    BOOL bOK = TRUE;

    //
    // make sure the key is open
    //
    if (m_hKey==NULL)
        return FALSE;

#ifndef _VXD_SOURCE_
    try
    {
#endif

#ifndef _VXD_SOURCE_
    CString sTmp;
    BYTE* szBuf = (BYTE*)sTmp.GetBuffer(132);
    sprintf( (LPTSTR)szBuf, _T("%lu"), dwValue);
    UINT uiLenWithNull = strlen((LPTSTR)szBuf) + 1; // ADD THE
    NULL!!!!!!
    m_lRetCode = ::RegSetValueEx (   m_hKey, (LPTSTR)sName,
                                    0, REG_SZ,
                                    szBuf, uiLenWithNull );
    bOK = (ERROR_SUCCESS == m_lRetCode);
#else
    #ifdef _UNICODE
        char sShort[512];
        char sDefault[512];
        BOOL b;
        *sDefault = *sShort=0;
        WideCharToMultiByte      ( CP_ACP, 0, sName, -1, sShort, 512,
        sDefault, &b );
        sprintf( sDefault, "%lu", dwValue );
        m_lRetCode = ::RegSetValueExA ( m_hKey, sShort, 0, REG_SZ,
        (LPBYTE)sDefault, strlen(sDefault)+1 );
    #else
        CString sTmp;

```

```

LPTSTR szBuf = sTmp.GetBuffer(XD_LEN_64);
wsprintf( (LPTSTR)szBuf, _T("%lu"), dwValue);
UINT uiLenWithNull = _tcslen((LPTSTR)szBuf) + 1; // ADD THE
NULL!!!!!!
m_lRetCode = ::RegSetValueEx ( m_hKey,
                               sName,
                               0,
                               REG_SZ,
                               (BYTE*)szBuf,
                               uiLenWithNull);
#endif
#endif
bOK = (ERROR_SUCCESS == m_lRetCode);

#ifndef _VXD_SOURCE_
{
    catch(...)
    {
        XDCATCH;
        bOK = FALSE;
    }
}
#endif

return bOK;
} // End of RegPutNum()

// -----
// Method: RegDeleteValue()
// Purpose:
//
BOOL xdRegistry::RegDeleteValue ( LPCTSTR szValue )
{
    BOOL bOK = TRUE;

    //
    // make sure the key is open
    //
    if (m_hKey==NULL)
        return FALSE;

#ifndef _VXD_SOURCE_
try
{

```

```

#endif

    m_lRetCode = ::RegDeleteValue( m_hKey, (LPTSTR)szValue );
    bOK = (ERROR_SUCCESS == m_lRetCode);

#ifndef _VXD_SOURCE_
}
catch(...)
{
    XDCATCH;
    bOK = FALSE;
}
#endif

return bOK;
} // End of RegDeleteValue()

// -----
// Method: RegEnumVal()
// Purpose: enumerates values for a key. i is the index to get
//
BOOL xdRegistry::RegEnumVal ( int i, LPCTSTR szValueName, UINT
uiNameLenWithNull,
                                LPCTSTR
szValueData, UINT uiDataLenWithNull)
{
    BOOL bOK = TRUE;
    DWORD dwIdx = i;
    DWORD dwSize = (DWORD) uiNameLenWithNull;
    DWORD dwDataSize = (DWORD) uiDataLenWithNull;
    LPBYTE pValue = (LPBYTE) szValueName;
    LPBYTE pDataValue = (LPBYTE) szValueData;

    //
    // make sure the key is open
    //
    if (m_hKey==NULL)
        return FALSE;

#ifndef _VXD_SOURCE_
try
{
#endif

    //
    // initialize the string to be empty

```

```

//  

memset ( pValue, 0, uiNameLenWithNull );  

memset ( pDataValue, 0, uiDataLenWithNull );  
  

#ifndef _VXD_SOURCE_  

    m_lRetCode = ::RegEnumValue(m_hKey,  

                                // hive/key  

                                dwIdx,  

                                (LPTSTR)pValue,  

                                &dwSize,  

                                0,  

                                NULL,  

                                pDataValue,  

                                &dwDataSize);  
  

#else  

    m_lRetCode = ::RegEnumValue(m_hKey,  

                                // hive/key  

                                dwIdx,  

                                (LPTSTR)pValue,  

                                &dwSize,  

                                0,  

                                NULL,  

                                pDataValue,  

                                &dwDataSize);  
  

#endif  
  

bOK = (ERROR_SUCCESS == m_lRetCode);  

if ( bOK == TRUE )  

{  

    //  

    // terminate the string...ensure that we dont go past  

    // the max length of the string!  

    //  

    ((LPTSTR)szValueName) [ min(dwSize,uiNameLenWithNull) ] =  

    0;  

    ((LPTSTR)szValueData) [ min(dwDataSize,uiDataLenWithNull) ]  

    = 0;  

}

```

```

#ifndef _VXD_SOURCE_
}
catch(...)
{
    XDCATCH;
    bOK = FALSE;
}
#endif

return bOK;
} // End of RegEnumVal()

// -----
// Method: RegPutBin()
// Purpose: write the information to the registry
//
BOOL xdRegistry::RegPutBin ( LPCTSTR szName, BYTE* pBuffer, UINT uiLength )
{
    BOOL bOK = TRUE;

    //
    // make sure the key is open
    //
    if (m_hKey==NULL)
        return FALSE;

#ifndef _VXD_SOURCE_
    try
    {
#endif
    // move everything into a temp buffer so that we can ensure
    // the existance of a NULL byte on the end of the string
    //
    CString sTmp;
    LPTSTR szBuf = sTmp.GetBuffer(132);
    memset ( szBuf, 0, 132 );
    memcpy ( szBuf, pBuffer, min(sTmp.GetAllocLength()-1,uiLength) );

    m_lRetCode = ::RegSetValueEx (   m_hKey,
                                    (LPTSTR)szName,
                                    0,
                                    REG_BINARY,

```

```

        (LPBYTE)
szBuf,
uiLength );

bOK = (ERROR_SUCCESS == m_lRetCode);

#ifndef _VXD_SOURCE_
}
catch(...)
{
    XDCATCH;
    bOK = FALSE;
}
#endif

return bOK;
} // End of RegPutBin()

// -----
// Method: RegEnumKey()
// Purpose: enumerates values for a key. i is the index to get
//
BOOL xdRegistry::RegEnumKey ( int i, LPCTSTR szValueName, UINT
uiNameLenWithNull)
{
    BOOL bOK = TRUE;
    DWORD dwIdx = i;
    DWORD dwSize = (DWORD) uiNameLenWithNull;
    LPBYTE pValue = (LPBYTE) szValueName;

    //
    // make sure the key is open
    //
    if (m_hKey==NULL)
        return FALSE;

#ifndef _VXD_SOURCE_
    try
    {
#endif
    // initialize the string to be empty
    //
    memset ( pValue, 0, uiNameLenWithNull );

#ifdef _VXD_SOURCE_
    m_lRetCode = ::RegEnumKey(m_hKey,           // hive/key

```

```

index of the value to get dwIdx,           //
valuename will go here (LPTSTR)pValue,    //
dwSize);          // the

size of the buffer
#else
m_lRetCode = ::RegEnumKey(m_hKey,
                           dwIdx,           // hive/key
                           (LPTSTR)pValue,  // 
                           dwSize);         // the

index of the value to get
valuename will go here
size of the buffer
#endif
bOK = (ERROR_SUCCESS == m_lRetCode);
if (bOK==TRUE)
{
    //
    // terminate the string...ensure that we dont go past
    // the max length of the string!
    //
    ((LPTSTR)szValueName) [ min(dwSize,uiNameLenWithNull) ] =
    0;
}

#ifndef _VXD_SOURCE_
}
catch(...)
{
    XDCATCH;
    bOK = FALSE;
}
#endif

return bOK;
} // End of RegEnumKey()

```

```

//



// Module: xdFileIO.cpp
// Subsystem: X:drive Tools Library (xdTools.dll)
// Contents: Redefinitions for the FILE IO functions
//
// -----
// Copyright (c) 1999 by X:drive(tm), Inc.
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// All rights reserved.
// -----
// -----
// 
#include "stdafx.h"
#include <xdGlobals.h>           // X:drive system wide globals
#include <xdTools.h>

#ifndef _DEBUG
    #undef THIS_FILE
    static char BASED_CODE THIS_FILE[] = __FILE__;
#endif

#ifndef _VXD_SOURCE_
    #include LOCKED_CODE_SEGMENT
    #include LOCKED_DATA_SEGMENT
#endif

#ifndef _VXD_SOURCE_
// -----
// Function: CreateFile()
// Purpose: This API function maps the standard Win32 CreateFile function
//           to the Ring-0 R0_OpenCreateFile() call.
// Returns: INVALID_HANDLE_VALUE - bad
//           something else - good!
//
HANDLE CreateFile ( LPCTSTR lpFileName,      // pointer to name of the file
                    DWORD dwDesiredAccess,   // access (read-
                    write) mode
                    DWORD dwShareMode,      // share mode
                    void* lpSecAtt,          // 
                    DWORD dwCreateFlags,     // how to
                    DWORD dwFlagsAndAttributes, // file
                    HANDLE)                 // 
pointer to security attributes
create
attributes

```

```

{
    HANDLE      h = INVALID_HANDLE_VALUE;
    WORD        wError = 0;
    WORD        wMode = 0;
    BYTE action = 0;

    switch (dwDesiredAccess)
    {
        case GENERIC_READ:
            wMode = OPEN_ACCESS_READONLY;
            break;
        case GENERIC_WRITE:
            wMode = OPEN_ACCESS_WRITEONLY;
            break;
        default:
            wMode = OPEN_ACCESS_READWRITE;
            break;
    }

    //
    // file sharing not supported!
    //
    wMode |= OPEN_SHARE_COMPATIBLE;

    //
    // Create Attributes
    //
    switch (dwCreateFlags)
    {
        case CREATE_NEW: // create New file. fail if file exists
            action = ACTION_IFEXISTS_FAIL |
                ACTION_IFNOTEXISTS_CREATE;
            break;
        case CREATE_ALWAYS: // create New file. overwrite if exists
            action = ACTION_IFEXISTS_TRUNCATE |
                ACTION_IFNOTEXISTS_CREATE;
            break;
        case OPEN_EXISTING: // open file, fail if the file does not exists
            action = ACTION_IFEXISTS_OPEN | ACTION_IFNOTEXISTS_FAIL;
            break;
        case OPEN_ALWAYS: // open file. if !exists, create
            action = ACTION_IFEXISTS_OPEN |
                ACTION_IFNOTEXISTS_CREATE;
            break;
        case TRUNCATE_EXISTING: // open&truncate file. fail if it does not exist
    }
}

```

```

        action = ACTION_IFEXISTS_OPEN |
ACTION_IFEXISTS_TRUNCATE | ACTION_IFNOTEXISTS_FAIL;
        break;
    }

    h = R0_OpenCreateFile(1,(LPTSTR)lpFileName,wMode,
ATTR_NORMAL,action,R0_NO_CACHE,&wError, &action);
    return h;
} // End of CreateFile()

// -----
// Function: ReadFile()
// Purpose: This API function maps the standard Win32 ReadFile function
//           to the Ring-0 R0_ReadFile() call.
// Returns: TRUE - Good read
//           FALSE - Bad Read
//
BOOL ReadFile ( HANDLE hFile, void* lpBuffer, DWORD dwBytesToRead,
                DWORD* pdwBytesRead, void* pdwOffset)
{
    WORD wError = 0;
    DWORD dwOffset = 0;

    if ( pdwOffset )
        dwOffset = *((DWORD*)pdwOffset);

    *pdwBytesRead = R0_ReadFile ( TRUE, hFile, lpBuffer, dwBytesToRead,
                                dwOffset, &wError );
    return ( wError == 0 );
} // End of ReadFile()

// -----
// Function: WriteFile()
// Purpose: This API function maps the standard Win32 WriteFile function
//           to the Ring-0 R0_WriteFile() call.
// Returns: TRUE - Good write
//           FALSE - Bad write
//
BOOL WriteFile ( HANDLE hFile, LPCTSTR lpBuffer, DWORD dwBytesToWrite,
                 DWORD* pBytesWritten, void* p)
{
    WORD      wError = 0;
    DWORD      dwFilePos = R0_GetFileSize(hFile,&wError);
    *pBytesWritten = R0_WriteFile ( TRUE, hFile, (void*)lpBuffer,
dwBytesToWrite,

```

```

dwFilePos, &wError
);
    return (wError == 0);
} // End of WriteFile()

// -----
// Function: CloseHandle()
// Purpose: This API function maps the standard Win32 CloseHandle function
//           to the Ring-0 R0_CloseFile() call.
// Returns: TRUE - success
//           FALSE - failure
//
BOOL CloseHandle ( HANDLE hFile )
{
    WORD wError = 0;
    return R0_CloseFile ( hFile, &wError );
} // End of CloseHandle()

// -----
// Function: GetFileSize()
// Purpose: This API function maps the standard Win32 GetFileSize function
//           to the Ring-0 R0_GetFileSize() call.
// Returns: TRUE - success
//           FALSE - failure
//
DWORD GetFileSize ( HANDLE hFile, DWORD* pdwHigh )
{
    WORD wError = 0;
    return R0_GetFileSize ( hFile, &wError );
} // End of GetFileSize()

// -----
// Function: ReadFileLine()
// Purpose: This API function maps the standard Win32 ReadFile function
//           to the Ring-0 R0_ReadFile() call.
// Returns: TRUE - Good read
//           FALSE - Bad Read
//
BOOL ReadFileLine ( HANDLE hFile, BYTE* lpBuffer,
                    DWORD dwBytesToRead,
                    DWORD* pdwBytesRead,
                    DWORD* pdwOffset )
{
    WORD wError = 0;
    DWORD dwOffset = 0;
}

```

```

if( pdwOffset )
    dwOffset = *(DWORD*)pdwOffset;

//
// Check for EOF
//
if( dwOffset >= R0_GetFileSize(hFile,&wError) )
    return FALSE;

// *pdwBytesRead = R0_ReadFile ( TRUE, hFile, lpBuffer, dwBytesToRead,
//                               dwOffset, &wError );

memset ( lpBuffer, 0, dwBytesToRead );

int iTmpBytesRead = 1;
BOOL bFoundEOL = FALSE;
int i=0;
for ( i=0; (iTmpBytesRead != 0) && (i<dwBytesToRead) &&
      (wError == 0) && (bFoundEOL==FALSE); i++ )
{
    iTmpBytesRead = R0_ReadFile ( TRUE, hFile, &(lpBuffer[i]), 1,
dwOffset+i, &wError );
    if ((iTmpBytesRead != 0) && (wError == 0))
    {
        if( lpBuffer[i] == chNL )
            bFoundEOL = TRUE;
    }
}

*pdwBytesRead = i;

return ( wError == 0 );
} // End of ReadFileLine()
#endif

```

```

//



// Module: xdDebugger.cpp
// Subsystem: X:drive Tools Library (xdTools.dll)
// Contents: Implementation module for the xdDebugger utility class.
//
// -----
// Copyright (c) 1999 by X:drive(tm), Inc.
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// All rights reserved.
// -----
// -----
//



#include "stdafx.h"
#include <xdGlobals.h>           // X:drive system wide globals
#include <xdTools.h>             // X:drive Tools Related
#include <xdDebugger.h>

#ifndef _VXD_SOURCE_
    #include <afxmt.h>
    #include "resource.h"
#endif

#ifndef _DEBUG
    #undef THIS_FILE
    static char BASED_CODE THIS_FILE[] = __FILE__;
#endif

#ifndef _VXD_SOURCE_
    #include LOCKED_CODE_SEGMENT
    #include LOCKED_DATA_SEGMENT
#endif

// -----
// Method: xdDebugger()
// Purpose: Constructor for the debugger class.
//
xdDebugger::xdDebugger()
{
    #ifndef _VXD_SOURCE_
        try
    #endif
    {
        m_szLogFile = (LPTSTR)malloc(XD_LEN_1024);
        m_szMsg = (LPTSTR)malloc(XD_LEN_2048);
    }
}


```

```

m_szBuf = (LPTSTR)malloc(XD_LEN_2048);

m_hLogFile = NULL;
m_bLogFile = FALSE;

_tcscopy ( m_szLogFile, XD_LOGFILE_NP );

#ifndef _VXD_SOURCE_
    m_pSem = new CSemaphore(1,1);
#endif
}

#ifndef _VXD_SOURCE_
    catch(...)
    {
        XDCATCH;
    }
#endif
} // End of xdDebugger()

// -----
// Method: ~xdDebugger()
// Purpose: Destructor.
//
xdDebugger::~xdDebugger()
{
#ifndef _VXD_SOURCE_
    delete m_pSem;
#endif
    free(m_szMsg);
    free(m_szLogFile);
    free(m_szBuf);

} // End of ~xdDebugger()

// -----
// Method: DebuggerOn()
// Purpose: turns on debugging to the optional logfile
//
void xdDebugger::DebuggerOn(BOOL bInitialize)
{
#ifndef _VXD_SOURCE_
    WORD wError = 0;
    BYTE bAction = 0;

    //
    // force a creation of the file if it does not already exist. Then

```

```

// simply close the file; we'll open it when we need to write to
// it.
//
m_bLogFile = TRUE;
if( bInitialize == TRUE )
{
    LPTSTR szOldFile = (LPTSTR)malloc( XD_LEN_1024 );
    strcpy ( szOldFile, m_szLogFile );
    LPTSTR pDot = strrchr(szOldFile,chPERIOD);
    if( pDot != NULL)
        *pDot = NULL;
    strcat ( szOldFile, ".old" );
    R0_DeleteFile ( szOldFile, 0, &wError );
    R0_RenameFile ( m_szLogFile, szOldFile, &wError );
    m_hLogFile = R0_OpenCreateFile ( TRUE, m_szLogFile,
OPEN_SHARE_DENYWRITE|OPEN_ACCESS_WRITEONLY,
ATTR_NORMAL,
ACTION_IFEXISTS_TRUNCATE|
ACTION_IFNOTEXISTS_CREATE,
0, &wError,
(PUCHAR)&bAction );
    free(szOldFile);
}
else
    m_hLogFile = R0_OpenCreateFile ( TRUE, m_szLogFile,
OPEN_SHARE_DENYWRITE|OPEN_ACCESS_WRITEONLY,
ATTR_NORMAL,
ACTION_IFEXISTS_OPEN|
ACTION_IFNOTEXISTS_CREATE,
0, &wError,
(PUCHAR)&bAction );
//
// Ok, we opened/created the close it again. We never want to keep
// the logfile open so that we ensure that its contents are saved
// to disk.
//
if( (m_hLogFile != NULL) && (wError == 0) )
    R0_CloseFile ( m_hLogFile, &wError );

```

```

        m_hLogFile = NULL;
#else
try
{
    //
// force a creation of the file if it does not already exist. Then
// simply close the file; we'll open it when we need to write to
// it.
//
m_bLogFile = TRUE;

if(bInitialize == TRUE)
{
    CString sOldFile;
    LPTSTR szOldFile = sOldFile.GetBuffer(512);
    _tcscpy ( szOldFile, m_szLogFile );
    LPTSTR pDot = _tcsrchr(szOldFile,chPERIOD);
    if (pDot != NULL)
        *pDot = NULL;
    _tcscat ( szOldFile, _T(".old") );
    DeleteFile ( szOldFile );
    try
    {
        CFile::Rename( m_szLogFile, szOldFile );
    }
    catch(...)
    {
    }
}

#endif _UNICODE
#else
#endif
#endif _UNICODE
else
{
#endif _UNICODE
else
{
#endif
    if( m_hLogFile != NULL )
        fclose(m_hLogFile);
    m_hLogFile = NULL;
}
catch(...)
{
}

```

```

        XDCATCH;
    }
#endif

} // End of DebuggerOn()

// -----
// Method: DebuggerOff()
// Purpose: turns off debugging to the optional logfile
//
void xdDebugger::DebuggerOff()
{
#ifdef _VXD_SOURCE
    WORD wError = 0;
    if (m_hLogFile!=NULL)
        R0_CloseFile ( m_hLogFile, &wError );
    m_bLogFile = FALSE;
#else
    m_bLogFile = FALSE;
#endif

} // End of DebuggerOff()

// -----
// Method: DEBUGMSG()
// Purpose: always dumps the messages to debugger window and optionally to
//          the file...
//
void xdDebugger::DEBUGMSG(TCHAR *fmt,...)
{

#ifdef _VXD_SOURCE_
    va_list      args;
    //
    // parse out the info
    //
    va_start(args,fmt);
    vsprintf(m_szBuf,fmt,args);
    va_end(args);
    //
    // add a <cr>
    //
    if (strchr(m_szBuf,chNL)==NULL)
        strcat(m_szBuf,"\r\n");

    strcpy ( m_szMsg, "FSD: ");

```

```

        strcat ( m_szMsg, m_szBuf );

#define DEBUG
    DEBUGTRACE(m_szMsg);
#endif

//
// if the logfile is engaged, dump it!
//
if (m_bLogFile==TRUE)
{
    WORD wError = 0;
    BYTE bAction = 0;

//
// open the file, dump the string, then close the file!!!
//
    m_hLogFile = R0_OpenCreateFile ( TRUE, m_szLogFile,
OPEN_SHARE_DENYWRITE|OPEN_ACCESS_WRITEONLY,
ATTR_NORMAL,
ACTION_IFEXISTS_OPEN | ACTION_IFNOTEXISTS_CREATE,
0, &wError,
(PUCHAR)&bAction );
    if ((m_hLogFile != NULL) && (wError == 0))
    {
        DWORD dwOffset = R0_GetFileSize ( m_hLogFile, &wError );
        R0_WriteFile ( TRUE, m_hLogFile, m_szMsg, strlen(m_szMsg),
dwOffset, &wError);
        R0_CloseFile(m_hLogFile,&wError);
        m_hLogFile = NULL;
    }
}
#else
try
{
//
// only wait 1 second, then do it. This guarantees that
// we dont lock up the system
//
    if ( m_pSem->Lock(5000) == TRUE )
    {
        va_list      args;
        //

```

```

// parse out the info
//
va_start(args,fmt);
_vstprintf(m_szBuf,fmt,args);
va_end(args);
//
// add a <cr>
//
if (_tcschr(m_szBuf,chNL)==NULL)
    _tcscat(m_szBuf,szNL);

*m_szMsg = 0;
_tcscpy(m_szMsg,_T("LOG: "));
_tcscat(m_szMsg,m_szBuf);

//
// dump it to the IDE debugger
//
#ifndef _DEBUG
    OutputDebugString(m_szMsg);
#endif

//
// if the logfile is engaged, dump it!
//
if (m_bLogFile == TRUE)
{
    //
    // open the file, dump the string, then close the file!!!
    //

#ifdef _UNICODE
    m_hLogFile = _wfopen(m_szLogFile,_T("a"));
#else
    m_hLogFile = fopen(m_szLogFile,_T("a"));
#endif

    if (m_hLogFile != NULL)
    {
        _fputts(m_szMsg,m_hLogFile);
        //fflush(m_hLogFile);
        fclose(m_hLogFile);
        m_hLogFile = NULL;
    }
}
}
}

```

```

        catch(...)
    {
        XDCATCH;
        if (m_hLogFile!=NULL)
        {
            //fflush(m_hLogFile);
            fclose(m_hLogFile);
            m_hLogFile = NULL;
        }
    }
    m_pSem->Unlock();
#endif

} // End of DEBUGMSG

#ifndef _VXD_SOURCE_
// -----
// Method: DEBUGMSG()
// Purpose: loads the string and then dumps it to the logfile.
//
void xdDebugger::DEBUGMSG(UINT uiResourceId)
{
    CString s = XD_LOADSTRING(uiResourceId);
    DEBUGMSG( T("%s\n"),s );
} // End of DEBUGMSG()
#endif

// -----
// Method: SetLogName()
// Purpose:
//
void xdDebugger::SetLogName(LPCTSTR s)
{
    _tcscpy ( m_szLogFile, s );
} // End of SetLogName()

// -----
// Method: IsDebuggerOn()
// Purpose:
//
BOOL xdDebugger::IsDebuggerOn ( void )
{
    return m_bLogFile;
} // End of IsDebuggerOn()

```

# APPENDIX 3

## JavaScript Listing

## **JavaScript Listing**

---

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## //button.js

```
// Is called upon loading of page to set up the button image arrays
function XDloadToolbarButtons ()
{
    if (XD_gsAction == '') {
        for (var i=0; i < 4; i=i+3)
        {
            g_aimgUpload[i] = new Image();
            g_aimgDownload[i] = new Image();
            g_aimgNewFolder[i] = new Image();
            g_aimgMove[i] = new Image();
            g_aimgRename[i] = new Image();
            g_aimgDelete[i] = new Image();
            g_aimgHelp[i] = new Image();
            g_aimgView[i] = new Image();
            g_aimgShare[i] = new Image();

            g_aimgUpload[i].src = XD_gsGraphicsLanguageRoot+ "up" + i +
".gif";
            g_aimgDownload[i].src = XD_gsGraphicsLanguageRoot+ "down" + i
+.gif";
            g_aimgView[i].src = XD_gsGraphicsLanguageRoot+ "view" + i +
".gif";
            g_aimgNewFolder[i].src = XD_gsGraphicsLanguageRoot+ "new" + i
+.gif";
            g_aimgMove[i].src = XD_gsGraphicsLanguageRoot+ "move" + i +
".gif";
            g_aimgRename[i].src = XD_gsGraphicsLanguageRoot+ "name" + i +
".gif";
            g_aimgDelete[i].src = XD_gsGraphicsLanguageRoot+ "delete" + i
+.gif";
            g_aimgShare[i].src =  XD_gsGraphicsLanguageRoot+ "share" + i +
".gif";

//                g_aimgUpload[i].src = XD_gsGraphicsLanguageRoot+ "nav_upload"
+i + ".gif";
//                g_aimgDownload[i].src = XD_gsGraphicsLanguageRoot+
"nav_download" + i + ".gif";
//                g_aimgView[i].src = XD_gsGraphicsLanguageRoot+ "nav_view" + i
+.gif";
//                g_aimgNewFolder[i].src = XD_gsGraphicsLanguageRoot+
"nav_newfolder" + i + ".gif";
//                g_aimgMove[i].src = XD_gsGraphicsLanguageRoot+ "nav_move" + i
+.gif";
//                g_aimgRename[i].src = XD_gsGraphicsLanguageRoot+ "nav_rename"
+i + ".gif";
//                g_aimgDelete[i].src = XD_gsGraphicsLanguageRoot+ "nav_delete"
+i + ".gif";
//                g_aimgShare[i].src =  XD_gsGraphicsLanguageRoot+ "nav_share" +
i + ".gif";
        }
    }
}
```

```

// Takes a button and an event and returns a status
// as defined by the containst button statuses
function XDtoolbarButtonStatus(button, event)
{
    var rv = XD_TOOLBAR_BUTTON_ENABLED;

    // Just exit if no controls are enabled
    if(!ControlsEnabled)
    {
        return XD_TOOLBAR_BUTTON_DISABLED;
    }

    if (event == XD_EVENT_MOUSEOVER)
    {
        rv = XD_TOOLBAR_BUTTON_ACTIVE;
    }
    else if (event == XD_EVENT_MOUSEOUT)
    {
        rv = XD_TOOLBAR_BUTTON_ENABLED;
    }
    else if (event == XD_EVENT_CLICK)
    {
        rv = XD_TOOLBAR_BUTTON_CLICKED;
    }

    if ((button == XD_TOOLBAR_BUTTON_UPLOAD)
    && (XD_gnSelectedFolderCount != 1))
    {
        rv = XD_TOOLBAR_BUTTON_DISABLED;
    }
    else if
        ((button == XD_TOOLBAR_BUTTON_DOWNLOAD)
         && (XD_gnSelectedCount != 1 || XD_gnSelectedFolderCount != 0))
    {
        rv = XD_TOOLBAR_BUTTON_DISABLED;
    }
    else if

        ((button == XD_TOOLBAR_BUTTON_NEWFOLDER)
         && (XD_gnSelectedFolderCount != 1))
    {
        rv = XD_TOOLBAR_BUTTON_DISABLED;
    }
    else if

        ((button == XD_TOOLBAR_BUTTON_MOVE)
         && (XD_gnSelectedCount == 0))
    {
        rv = XD_TOOLBAR_BUTTON_DISABLED;
    }
    else if

        ((button == XD_TOOLBAR_BUTTON_DELETE)
         && (XD_gnSelectedCount == 0))
    {
        rv = XD_TOOLBAR_BUTTON_DISABLED;
    }
}

```

```

else if
    ((button == XD_TOOLBAR_BUTTON_RENAME)
     && (XD_gnSelectedCount != 1))
{
    rv = XD_TOOLBAR_BUTTON_DISABLED;
}
else if
    (button == XD_TOOLBAR_BUTTON_VIEW)
{
    rv = XD_TOOLBAR_BUTTON_DISABLED;
if (XD_gnSelectedCount == 1 && XD_gnSelectedFolderCount == 0)
{
    rv = XD_TOOLBAR_BUTTON_ENABLED;
}
}
else if
    (button == XD_TOOLBAR_BUTTON_SHARE)
{
    rv = XD_TOOLBAR_BUTTON_DISABLED;
if (XD_gnSelectedCount == 1 && XD_gnSelectedFolderCount == 0)
{
    rv = XD_TOOLBAR_BUTTON_ENABLED;
}
}

return rv;
}

// Wrapper for updating images, used for checking if the image exists before
// attempting to update it.

function XDImageUpdate (oImage,imgGraphic)
{
    if (oImage)
    {
        // If the image exists then update it
        oImage.src = imgGraphic;
    }
else
    {
        // otherwise do nothing
    }
}

// Takes a button and an event, finds the status
// and then refreshes the button.

function XDrefreshButton (sButton, sEvent)
{
    if (XD_gsAction == '') {
var nStatus = XDtoolbarButtonStatus(sButton, sEvent);
var oFrame = XD_goFrameControls;

XD_gsPreviousGrove = grove;

if (sButton == XD_TOOLBAR_BUTTON_UPLOAD)
{

```

```

        XDImageUpdate(oFrame.document.img_upload,g_aimgUpload[nStatus].src);
    }
else if (sButton == XD_TOOLBAR_BUTTON_DOWNLOAD)
{
    XDImageUpdate(oFrame.document.img_download,g_aimgDownload[nStatus].src);
}
else if (sButton == XD_TOOLBAR_BUTTON_NEWFOLDER)
{
    XDImageUpdate (oFrame.document.img_newfolder,
g_aimgNewFolder[nStatus].src);
}
else if (sButton == XD_TOOLBAR_BUTTON_MOVE)
{
    XDImageUpdate(oFrame.document.img_move,g_aimgMove[nStatus].src);
}
else if (sButton == XD_TOOLBAR_BUTTON_RENAME)
{
    XDImageUpdate(oFrame.document.img_rename,g_aimgRename[nStatus].src);
}
else if (sButton == XD_TOOLBAR_BUTTON_DELETE)
{
    XDImageUpdate(oFrame.document.img_delete,g_aimgDelete[nStatus].src);
}
else if (sButton == XD_TOOLBAR_BUTTON_VIEW)
{
    XDImageUpdate(oFrame.document.img_view,g_aimgView[nStatus].src);
}
else if (sButton == XD_TOOLBAR_BUTTON_SHARE)
{
    XDImageUpdate(oFrame.document.img_share,g_aimgShare[nStatus].src);
}
}

//This refreshes all the buttons at one time.
function XDrefreshAllButtons()
{
    XDrefreshButton(XD_TOOLBAR_BUTTON_UPLOAD, null);
    XDrefreshButton(XD_TOOLBAR_BUTTON_DOWNLOAD, null);
    XDrefreshButton(XD_TOOLBAR_BUTTON_NEWFOLDER, null);
    XDrefreshButton(XD_TOOLBAR_BUTTON_MOVE, null);
    XDrefreshButton(XD_TOOLBAR_BUTTON_RENAME, null);
    XDrefreshButton(XD_TOOLBAR_BUTTON_DELETE, null);
    XDrefreshButton(XD_TOOLBAR_BUTTON_VIEW, null);
    XDrefreshButton(XD_TOOLBAR_BUTTON_SHARE, null);
}

// Wraper that handles button click events.
function XDbuttonClick (sButton)
{
    XDrefreshButton(sButton, XD_EVENT_CLICK);
}

// Wrapper that handles the button MouseOver events
function XDbuttonOver (sButton)

```

```
{  
    XDrefreshButton(sButton, XD_EVENT_MOUSEOVER);  
}  
  
// Wrapper that handles teh button MouseOut events.  
function XDbuttonOut (sButton)  
{  
    XDrefreshButton(sButton, XD_EVENT_MOUSEOUT);  
}  
  
function XDfunctionStatus(button)  
{  
    if (! ControlsEnabled)  
    {  
        return false;  
    }  
  
    if (XDtoolbarButtonStatus(button, XD_EVENT_MOUSEOVER) ==  
XD_TOOLBAR_BUTTON_ACTIVE)  
    {  
        return true;  
    }  
    else  
    {  
        return false;  
    }  
}
```

## //diskInfo.js

```
// NOTE: The table trick works differently in IE vrs Netscape. In netscape you
need to
// have an &nbsp; as a value within the TD's while in IE you do not need
anything.
function mresponse()
{
    parent.parent.parent.frames['centerview'].document.location =
"../explorer/more_space_mail.html";
}

function XDdisplayDiskInfo (oFrame)
{
    //3K always taken up by xdrive, public and private folders
    //changed code so it doesn't show as red any more
    var nUsed = XD_gnQuotaUsed;
    var nTotal = XD_gnQuotaTotal;

    //var nGraphWidth = XD_gnFileGraphWidth;
    var sGraphUsedColor = XD_gsUsedColor;
    var sGraphFreeColor = XD_gsFreeColor;

    var freeMB = nTotal - nUsed;
    var usedPercent = Math.round(100 * (nUsed/nTotal));

    ///// Do some basic bound checking
    if (usedPercent > 100)
    {
        usedPercent = 100;
        sGraphFreeColor = sGraphUsedColor;
    }
    if ( usedPercent < 0 )
    {
        usedPercent = 0;
    }

    var freePercent = 100-usedPercent;

    oFrame.write('<FORM name="controlForm">');

    oFrame.write('<TABLE width=500 border=0 cellpadding=0
cellspacing=0><TR>\n');
    oFrame.write('<TD width=300>&nbsp;</TD>\n');
    oFrame.write('<TD align="right" width=50><B><FONT size="-1">' + XD_gsEmpty +
'</FONT></B></TD>\n');
    oFrame.write('<TD align="center" width=100>\n');
    oFrame.write('<TABLE width=100 CELLPADDING=0 CELLSPACING=0
BORDER=0><TR>\n');
    if (usedPercent != 0)
    {
        oFrame.write('<TD height=10 WIDTH="' + usedPercent + '%" BGCOLOR="' +
sGraphUsedColor + '"></TD>\n');
    }
```

```

oFrame.write('<TD height=10 WIDTH="' + freePercent + '%" BGCOLOR="' +
sGraphFreeColor + '"></TD>\n');
oFrame.write('</TR></TABLE>\n');
oFrame.write('</TD><TD align="left" width=50><B><FONT size="-1">' + XD_gsFull + '</FONT></B></TD>\n');

oFrame.write('</TR>\n');
oFrame.write('</TABLE>\n');

if (usedPercent>90)
{
    oFrame.write('<TABLE width=500 border=0 cellpadding=0 cellspacing=0><TR><TD
width=300></TD><TD width=200
valign=center align=left><FONT size="-1" face="verdana,arial">' +
XD_gsOutOfSpace + '?<BR><A HREF="/cgi-bin/addspace.cgi?action=intro"
target="centerview">' + XD_gsBuyMore + '</A></FONT></TD></TR></TABLE>');
}

oFrame.write('<input type="hidden" name="multipleSelect" value="N">');
oFrame.write('</FORM>');
}

function XDSelectedList()
{
    return XD_gsSelectedList;
}

function XDSelectedFolder()
{
    return XD_gsSelectedFolderList.substring(0,XD_gsSelectedFolderList.length-
1);
}

*****  

* XDCleanupPath: Cleanup the passed path by removing the "/X:drive/" prefix  

* and the + postfix.  

*****  

function XDPATHCleanup(sPath)
{
    var sCopy = sPath;
    sCopy = sCopy.substring(9,sCopy.length)
        //sCopy = sCopy.substring(0,sCopy.length-1);
    return sCopy;
}

function XDMultiSelect (sValue)
{
    if (sValue != 'null' && sValue != "")
    {
        m_sMultiSelect = sValue;
    }
    else
    {
        return m_sMultiSelect;
    }
}

```

```

}

function HTMLNavigation ()
{
    var sHTML = HTMLStart()
        +'<table width="100%" border="0" cellspacing="0"
cellpadding="0">'
        +'<tr align="left" valign="top" bgcolor="#5EB114">'
        +'<td></td>'
        +'</tr><tr>'
        +'<td></td>'
        +'</tr><tr>'
        +'<td></td>'
        +'</tr></table>'
        +'<a target="toolbar" href="http://www.mit.edu">MIT</a>'
        +'</BODY>\n</HTML>';
    return sHTML;
}

function HTMLStart ()
{
    return "<HTML>\n"
    +'<body bgcolor="#6961AB" topmargin="0" leftmargin="0" marginheight="0"
marginwidth="0" text="#FFFFFF" vlink="#FFFFFF" alink="#FFFFFF" link="#FFFFFF"
{onload}>"
    +"\n";
}

function HTMLEnd ()
{
    return "\n</BODY>\n</HTML>\n";
}

function RedrawToolBar()
{
    var sWindow = 'window.toolbar';
    sWindow.document.write(HTMLStart()+'test'+HTMLEnd());
}

function roundOff(value, precision)
{
    value += .000000001;
    part = "" + parseInt(value);
    size = part.length;
    value = "" + value; //convert value to string
    return value.substring(0,size+1+precision);
}

function XDDiskUsed()
{
    var nUsed = XD_gnQuotaUsed;
    var nUsedMB = nUsed/1024;
    var nRound = roundOff(nUsedMB, 2);
    var sRounded;
}

```

```

//      if (nUsed < 1024)
//      {
//          sRounded = '.'+nRound;
//      }
//      else
//      {
//          sRounded = nRound;
//      }

        return sRounded;
}

function XDDiskTotal()
{
    var nTotal = XD_gnQuotaTotal;
    var nTotalMB = nTotal/1024;
    var nRound = roundOff(nTotalMB,2);
    var sRounded;

    //      if (nTotal < 1024)
    //      {
    //          sRounded = '.'+nRound;
    //      }
    //      else
    //      {
    //          sRounded = nRound;
    //      }

        return sRounded + ' MB';
}

function XDDiskFree()
{
    var nUsed = XD_gnQuotaUsed;
    var nTotal = XD_gnQuotaTotal;

    var nFreeMB = (nTotal - nUsed)/1024;
    var nRound = roundOff(nFreeMB,2);
    var sRounded;

    //      if (nFreeMB < 1)
    //      {
    //          sRounded = '.'+nRound;
    //      }
    //      else
    //      {
    //          sRounded = nRound;
    //      }

        return sRounded + ' MB';
}

```

## //launch.js

```
*****  
* XDEplorerLaunch: Launch the passed explorer URL in a popup window.  
*****  
  
function XDEplorerLaunch ( sURL, nHeight, nWidth )  
{  
    var w =  
    window.open( sURL, "XDriveExplorer", "location=no,toolbar=no,menubar=yes," +  
                "status=no,resizable=no,scrolling=yes,scrollbars=no," +  
                "width='"+nWidth+"',height='"+nHeight+"');  
  
    //*** make sure the opener knows who the parent is  
    if ( w.opener == null) w.opener = self;  
  
    //*** focus on the newly created window  
    w.focus();  
}  
  
function XDEplorerURL()  
{  
    return '/cgi-bin/explorer.cgi';  
}  
  
function XDDataURL()  
{  
    return '/cgi-bin/explorer_data.cgi';  
}
```

## //nav.js

```
// Added by Julie Wang 111999
//
// Function is used with <a href> to pop up another window to show X:drive's
Terms of Service
// page

function toc()
{
var url, window_name;

url="/company/toc.html";
window_name="toc";
window.open(
    url,
    window_name,
'toolbar=no,menubar=no,scrollbars=yes,fullscreen=no,resizable=no,width=650,height=400'
);
return;
}

// Added by Julie Wang 122199
//
// Function is used with <a href> to pop up another window to show a
// sample letter when someone use "Tell A Friend" feature.

function tell_a_friend_sample_email()
{
var url, window_name;

url="/generic_join_sample_email.html";
window_name="toc";
window.open(
    url,
    window_name,
'toolbar=no,menubar=no,scrollbars=yes,fullscreen=no,resizable=no,width=650,height=400'
);
return;
}

// Added by Julie Wang 102699
//
// Function writes the side bar nav. menu/buttons on general HTML pages for
every visitors.

function left_menu()
{
document.write('<table width=\"138\" border=\"0\" cellspacing=\"0\"'
cellpadding=\"0\">\n');
document.write('<tr align=\"left\" valign=\"top\">\n');
```

```

document.write('<td><a href="http://www.xdrive.com"></a><br></td>\n');
document.write('</tr>\n');
document.write('<tr align="left" valign="top">\n');
document.write('<td>\n');
document.write('<table width="138" border="0" cellspacing="0"
cellpadding="0" background="/graphics/internal/lines.gif">\n');
document.write('<tr align="left" valign="top">\n');
document.write('<td width="38"></td>\n');
document.write('<td align="left" valign="middle" width="100"><b><font
face="Arial, Helvetica, sans-serif" size="2"><a
href="/company/new.html">What's New</a></font></b></td>\n');
document.write('</tr>\n');
document.write('<tr align="left" valign="top">\n');
document.write('<td width="38"></td>\n');
document.write('<td align="left" valign="middle" width="100"><b><font
face="Arial, Helvetica, sans-serif" size="2"><a
href="/company/company.html">About X:drive</a></font></b></td>\n');
document.write('</tr>\n');
document.write('<tr align="left" valign="top">\n');
document.write('<td width="38"></td>\n');
document.write('<td align="left" valign="middle" width="100"><b><font
face="Arial, Helvetica, sans-serif" size="2"><a
href="/company/main_download.html">Desktop X:drive</a></font></b></td>\n');
document.write('</tr>\n');
document.write('<tr align="left" valign="top">\n');
document.write('<td width="38"></td>\n');
document.write('<td align="left" valign="middle" width="100"><b><font
face="Arial, Helvetica, sans-serif" size="2"><a
href="/affiliates/befree/index.html">X:drive
Affiliate</a></font></b></td>\n');
document.write('</tr>\n');
document.write('<tr align="left" valign="top">\n');
document.write('<td width="38"></td>\n');
document.write('<td align="left" valign="middle" width="100"><b><font
face="Arial, Helvetica, sans-serif" size="2"><a
href="/company/faq.html">FAQ</a></font></b></td>\n');
document.write('</tr>\n');
document.write('</table>\n');

document.write('</td>\n');
document.write('</tr>\n');
document.write('<tr align="left" valign="top">\n');
document.write('<td><a href="/cgi-bin/signup_form.cgi"></a></td>\n');
document.write('</tr>\n');
document.write('<tr align="left" valign="top">\n');

```

```

document.write('<td><br></td>\n');
document.write('</tr>\n');
document.write('<tr align="left" valign="top">\n');
document.write('<td><a href="/freebies/english/freebiesout.html"></a><br></td>\n');
document.write('</tr>\n');
document.write('<tr align="left" valign="top">\n');
document.write('<td><a href="/company/main_download.html"></a><br></td>\n');
document.write('</tr>\n');
document.write('<tr align="left" valign="top">\n');
document.write('<td><a href="/demo/index.html"></a><br></td>\n');
document.write('</tr>\n');
document.write('</table>\n');

document.close();
return true;
}

// Added by Martin Hald
function PathRemovePrefix(path)
{
    return path.substring(10,path.length);
}

// Function that redraws the file explorer

function show()
{
    var oDocument = FrameObject();

    oDocument.open("text/html");
    oDocument.write("<html>\n");
    oDocument.write("<head>\n");

    oDocument.write("</head>\n");
    oDocument.write('<body BGCOLOR="'+ XDBackgroundColor() + '" BACKGROUND="'+
+ XDBackgroundImage() + '">');
    oDocument.write(XD_sNewdoc);

    XDdisplayDiskInfo(oDocument);

    oDocument.write("</body>\n");
    oDocument.write("</html>\n");
}

```

```

        oDocument.close();
        XDrefreshAllButtons();
    }

// parses the XML tree from the top frame and first calls show.
// This must be called on load of the main page.
function process(sExtra)
{
    if (XD_gsAction == '')
    {

        grove = Xparse(XD_gsXML);

        //this resets the variables that track how many files and folders
        are selected
        //don't reset if we are going into an action
        XDresetSelected();
    }

    // If we have just performed an action that involved a folder then
    // we will open that folder so the user can see the results of the
    // action. To do so we update the old directory listing so that
    // the directory from which the action took place gets opened.
    if (XD_gnSelectedFolderID != '')
    {
        XD_gsPreviousGrove.index[XD_gnSelectedFolderID].attributes.show = 1;
    }

    // Now sync the view of the filesystem between the current and
    // previous views.
    synch(XD_gsPreviousGrove, grove);

    //reset attributes.selected for all items so that blue line does not get
    drawn
    XDresetAllSelected();
}

function BuildUpload()
{
    var oDocument = FrameObject();
    XD_gsActionUpload = true;
    HTMLGenericStart(oDocument);

    // var rand_num = parent.createRandomID();
    var rand_num = createRandomID();

    if (XD_gbExtraHelp)
    {
        oDocument.write(XDHelp(XD_gsHelpFileUpload));
    }

    oDocument.write("</TABLE>\n");

    oDocument.write('<p>\n');
    oDocument.write(XDHelp(XD_gsClientAd));
}

```

```

oDocument.write('</p>\n');

oDocument.write('<form name="form_upload" method="POST" action="/cgi-
bin/file_save.cgi" onSubmit="return
parent.parent.parent.openUpload(parent.parent.parent.XDCheckFormInput(), '/cgi-
bin/file_upload_stat.cgi?id='+rand_num+'\','window',(this));"
TARGET="centerview">');

// oDocument.write('<form name="form_upload" method="POST" action="/cgi-
bin/file_save.cgi" onSubmit="return (parent.parent.parent.XDCheckFormInput());"
TARGET="centerview">');

oDocument.write(' enctype="multipart/form-data">'+'\n');
var results = '';
results += '<input type="hidden" name="sFolderCurrent" value="'+
XDSelectedFolder() +'">\n';
oDocument.write(results);

oDocument.write('<input type=hidden name=id value='+rand_num+'>');

oDocument.write('<TABLE cols=2>'+'\n');

for (var i=1; i<=5; i++)
{
  oDocument.write('<tr><td valign="top" width="30"><FONT face="verdana,
arial, sans" size="-1"><b>' + XD_gsFile + i + ': </b></FONT></td><td><FONT
face="verdana, arial, sans" size="-1"><input type="file" name="file_to_upload_0'
+ i + '" size="20"></FONT></td></tr>'+'\n');
}
oDocument.write('</tr>'+'\n');
oDocument.write('<tr valign="top"> '+'\n<td colspan=2>\n');
oDocument.write('<center>'+'\n');
oDocument.write(XDFormSubmitButtons());
oDocument.write('</center>'+'\n');
oDocument.write('</td>'+'\n');
oDocument.write('</tr>'+'\n');
oDocument.write('</TABLE>');
oDocument.write('</body>'+'\n');
oDocument.write('</html>'+'\n');
oDocument.close();
XD_gnFrameHeight='85';
return true;
}

function BuildCreate()
{
  var oDocument = FrameObject();
  HTMLGenericStart(oDocument);

  if (XD_gbExtraHelp)
  {
    oDocument.write(XDHelp(XD_gsHelpCreateFolder));
  }

  oDocument.write('<form name="form_create" action="/cgi-
bin/folder_create.cgi" method="POST" onSubmit="return
parent.parent.parent.XDCheckFormInput();" target="centerview">');

```

```

var results = '';
results += '<input type="hidden" name="sFolderCurrent" value="'+
XDSelectedFolder() +'">\n';
oDocument.write(results);
oDocument.write('<tr><td valign=center><B>' + XD_gsFolderName +':</b>');
oDocument.write('<input type="text" name="sFolderNew" value=""><br>');
oDocument.write(XDFormSubmitButtons());
oDocument.write('</td></tr>');

oDocument.write('</TABLE>');
oDocument.write('</body>'+ "\n");
oDocument.write('</html>'+ "\n");
oDocument.close();
XD_gnFrameHeight='85';
return true;
}

function BuildRename()
{
    var oDocument = FrameObject();
    HTMLGenericStart(oDocument);

    if (XD_gbExtraHelp)
    {
        oDocument.write(XDHelp(XD_gsHelpFolderRename));
    }

    oDocument.write('<form method="POST" name="form_rename" action="/cgi-
bin/selected_rename.cgi" onSubmit="return
parent.parent.parent.XDCheckFormInput();"' );
    oDocument.write(' target="centerview" value="'+XDSelected()+'>\n');
    var results = '';
    results += '<input type="hidden" name="sFolderCurrent"
value="'+XDSelectedFolder()+'>\n';
    oDocument.write(results);
    oDocument.write('<tr><td valign=center><B>' + XD_gsNewName + ':</b>');
    oDocument.write('<input type="hidden" name="sItemCurrent" value="'+
XDSelected() +'>\n');

    if (XDProfileEditExtensions)
    {
        oDocument.write('<input type="text" name="sItemNew" value="' +
XDSelectedThingName()+'>\n');
        oDocument.write('<input type="hidden" name="sItemExtension"
value="">\n');
    }
    else
    {
        oDocument.write('<input type="text" name="sItemNew"
value="'+XDSelectedThingNameMinusExtension()+'>' +XDSelectedThingNameExtension()+
'+\n');
        oDocument.write('<input type="hidden" name="sItemExtension"
value="'+XDSelectedThingNameExtension()+'>\n');
    }
    oDocument.write(XDFormSubmitButtons());
    oDocument.write('</td></tr>');
    oDocument.write('</TABLE>');
}

```

```

oDocument.write('</body>' + "\n");
oDocument.write('</html>' + "\n");
oDocument.close();
XD_gnFrameHeight='85';
return true;
}

function BuildDelete()
{
    var oDocument = FrameObject();
    HTMLGenericStart(oDocument);

    var pathToFile = XDSelected();
    var lastSlash = pathToFile.lastIndexOf('/');
    var file = pathToFile.substring(lastSlash+1,pathToFile.length);

    if (XD_gbExtraHelp)
    {
        oDocument.write(XDHelp(XD_gsHelpDelete));
    }
    oDocument.write('<form name="form_delete" action="/cgi-
bin/selected_delete.cgi" method="POST" onSubmit="return
parent.parent.parent.XDCheckFormInput();" target="centerview">');
    var results = '';
    results += '<input type="hidden" name="sFolderCurrent" value="' +
XDSelectedFolder() +'">\n';
    oDocument.write(results);
    oDocument.write('<tr><td valign=center><B>' + XD_gsSureDelete + ' ' + file
+ '?</B>');
    oDocument.write('<input type="hidden" name="sItemCurrent" value="' +
XDSelected() + '"><br>');
    oDocument.write('<input type="hidden" name="sFolderCurrent" value="' +
XDSelectedFolder() + '"><br>');
    oDocument.write(XDFormSubmitButtons());

    oDocument.write('</td></tr>');
    HTMLGenericEnd(oDocument);
    XD_gnFrameHeight='85';
    return true;
}

function BuildExplorer (grove,sStartDirectory)
{
    var returnValue = true;

    if (XD_gsAction == 'Upload')
    {
        returnValue = BuildUpload();
    }
    else if (XD_gsAction == 'Create')
    {
        returnValue = BuildCreate();
    }
    else if (XD_gsAction == 'Rename')
    {
        returnValue = BuildRename();
    }
}

```

```

        }

    else if (XD_gsAction == 'Delete')
    {
        returnValue = BuildDelete();
    }
    else
    {
        var result = '';
        var nDepth = -2;

        result += '<TABLE compact border=0 cellspacing=0 cellpadding=4
width="'+ XD_gnExplorerTableWidth +'>\n';
        result += XDFormSubmitButtons(1);

        result += "<tr><th align=\"left\">" + XDEplorerFont() + '<font
size="2">' + XDPosesive(XD_gsFirstName + ' ' + XD_gsLastName) + " X:drive <BR>
+XDDiskTotal() +" +XD_gsCapacity+", "
+XDDiskFree() +" +XD_gsRemaining
+"</th><th align=\"left\">" +
XDEplorerFont()+'<font size="2">' + XD_gsSize + "</th><th
align=\"left\">" +
XDEplorerFont()+'<font size="2">' + XD_gsLastModified +
"</th></tr>\n";
        result += dotag(grove, sStartDirectory, nDepth);
        result += "</TABLE>\n";
        XD_sNewdoc = result;

        show();

        //johngaa 11/22/99
        //Highlight bug fix
        if (XD_gsXOffset || XD_gsYOffset)
        {
            XD_goFrameFileExplorer.scrollTo(XD_gsXOffset,XD_gsYOffset);
        }
        //end of johngaa bug fix

    }
    return returnValue;
}

function XDPosesive(name)
{
    var length = name.length;
    var lastChar = name.charAt(length-1);
    var possesive=name + "'s";
    if (lastChar == 's')
    {
        possesive = name + "'";
    }
    return possesive;
}

function XDEplorerFont()
{

```

```

return '<font face="verdana, arial, sans">';
}

// constructs the HTML from the file explorer from the parsed XML
function dotag(tag, path, nDepth)
{
    path += '/' + tag.name;

    var result = '';
    var sCellColor = new String();
    var sIconImage = new String();
    var sFolderPointer = new String();
    var fileSize = new String();
    var fileString = new String();

    var sDate; // The last modified date and time stamp

    //johngaa 11/23/99
    //highlight netscape bug fix
    // var sFlipFunction = new String('parent.parent.parent.flip(' + tag.uid +
    ')');
    if (navigator.appName == "Netscape")
    {
        var sFlipFunction = new String('parent.parent.parent.flip(' + tag.uid +
        ',window.pageXOffset>window.pageYOffset)');
    }
    else
    {
        var sFlipFunction = new String('parent.parent.parent.flip(' + tag.uid +
        ',document.body.scrollLeft,document.body.scrollTop)');
    }

    //johngaa orginal 11/22/99
    //highlight netscape bug fix
    //var sSelectToggleFunction = new
String('parent.parent.parent.XDselectToggle(' + tag.uid + ')');
    if (navigator.appName == "Netscape")
    {
        var sSelectToggleFunction = new
String('parent.parent.parent.XDselectToggle(' + tag.uid +
        ',window.pageXOffset>window.pageYOffset)');
    }
    else
    {
        var sSelectToggleFunction = new
String('parent.parent.parent.XDselectToggle(' + tag.uid +
        ',document.body.scrollLeft,document.body.scrollTop)');
    }
    //end of johngaa bug fix

    // If the object is selected,
    // then add it to the selected arrays
    // and up the selected counts
    // and set the cell color to selected

```

```

//set background color of the cells depending on status: selected, move
or at rest
if (tag.attributes.selected)
{
    XD_gnSelectedCount=1;
    sCellColor =XD_gsSelectedColor;
    XD_gsSelectedList += PathRemovePrefix(path) + '+';

    if (tag.attributes.folder)
    {
        XD_gnSelectedFolderCount=1;
        XD_gnSelectedFolderID = tag.uid;
        XD_gsSelectedFolderList += PathRemovePrefix(path) + '+';
    }
    else
    {
        XD_gnSelectedFileCount=1;
    }
}
else if (tag.attributes.move)
{
    // ELSE IF, it is set to move,
    // Then change the colors and
    sCellColor = XD_gsMoveSelectedColor;
}
else
{
    // ELSE, set the cell color to not selected
    sCellColor = XD_gsNotSelectedColor;
}

if (tag.attributes.folder)
{
    // SET special graphics and links for folder.
    nDepth++;

    if (tag.attributes.show)
    {
        if (tag.attributes.move)
        {
            // The folder is open
            sFolderPointer = '<IMG SRC="' + XD_gimgOpenFolderPointer + '" BORDER="0">\n';
            sIconImage = '<IMG SRC="' + XD_gimgOpenFolder + '"';
            BORDER="0" ALIGN="absmiddle" +'"\n\t'+ 'HSPACE="2" VSPACE="0" HEIGHT="16" WIDTH="16">';
        }
        else
        {
            sFolderPointer = '<A HREF="javascript:' + sFlipFunction +
            + ';"><IMG SRC="' + XD_gimgOpenFolderPointer + '" BORDER="0"></A>\n';
            sIconImage = '<IMG SRC="' + XD_gimgOpenFolder + '"';
            BORDER="0" ALIGN="absmiddle" +'"\n\t'+ 'HSPACE="2" VSPACE="0" HEIGHT="16" WIDTH="16">';
        }
    }
}

```

```

        else
        {
            sFolderPointer = '<A HREF="javascript:' + sFlipFunction + ';"><IMG
SRC="' + XD_gimgClosedFolderPointer + '"' + "\n"+ ' BORDER="0"></A>\n';
            sIconImage = '<IMG SRC="' + XD_gimgFolder + '" BORDER="0"
ALIGN="absmiddle" '+"\\n\\t"+ 'HSPACE="2" VSPACE="0" HEIGHT="16" WIDTH="16">';
        }
    }
    else
    {
        // This is a file and not a folder so show a FILE icon and do not
show any + or -
        sFolderPointer = ExplorerBlankFolderPointer();
        sIconImage = '<IMG SRC="' + XD_gimgFile + '" BORDER="0"
ALIGN="absmiddle" '+"\\n\\t"+ 'HSPACE="4" VSPACE="0">';
    }
}

if (tag.attributes.size)
{
    // SET file size indicator is attribute is present
    fileSize = XDEplorerFont() + tag.attributes.size + 'k';
}
else
{
    fileSize = ' ';
}

if (tag.attributes.lastModified)
{
    sDate = tag.attributes.lastModified;
}
else
{
    sDate = ' ';
}

if (tag.attributes.move)
{
    fileString = sIconImage;
}
else
{
    fileString = '<A HREF="javascript:' + sSelectToggleFunction + ';">'+
'\\n' + sIconImage;
}

if ((tag.attributes.folder) || (!XDAction('Move')) ||
(tag.attributes.move))
{
    // ONLY show IF it is (a folder or not in moving)
    // OR the object is question is being moved.
    result += '<A NAME="' + tag.name + '"></A><TR>';
    result += '<TD BGCOLOR="' + sCellColor + '" valign="absmiddle"><p>';
    result += "\\n";
    result += "\\n";
}

```

```

        result += _indent(nDepth);
        result += sFolderPointer;
        result += fileString;
        result += XDEplorerFont();
        result += '<FONT SIZE="2">';
        result += tag.name;
        result += '</A></TD>';
        result += "\n";
        result += "\n";
        result += '<TD BGCOLOR="' + sCellColor + '"';
valign="absmiddle"><p><FONT SIZE="2">' + fileSize + '</FONT></TD>';
        result += '<TD BGCOLOR="' + sCellColor + '"';
valign="absmiddle"><p><FONT SIZE="2">';
        result += XDEplorerFont();
        result += sDate;
        result += "</FONT></td>\n";

        result += '</TR>';
        result += "\n";
    }

    if (tag.attributes.show)
    {
        for (var i = 0; i < tag.contents.length; i++)
        {
            if (tag.contents[i].type == "element")
            {
                // To sort we simply recursivly call ourselves with the
next element
                // in the sort order
                result += dotag(tag.contents[i], path, nDepth);
                result += "\n";
            }
        }
    }

    return result;
}

function ExplorerBlankFolderPointer ()
{
    return '<IMG SRC="/images/explorer/fnot.gif" WIDTH=15 HEIGHT=15
BORDER=0>\n';
}

// returns a true if the tag has any children that are selected
function XDopenChild(tag, children)
{
    var result = false;

    if (children)
    {
        if ((tag.attributes.selected) || (tag.attributes.move))
        {
            //added so user can close folder if items are selected

```

```

        //deselects item in folder if folder is closed
        tag.attributes.selected=false;

        //original
        return true;
    }
}

for (var i = 0; i < tag.contents.length; i++)
{
    if (tag.contents[i].type == "element")
    {
        if (XDopenChild(tag.contents[i], 1))
        {
            //added so user can close folder if items are selected
            //deselects item in folder if folder is closed
            grove.index[i].attributes.selected = false;
            return false;

            //original
            //return true;
        }
    }
}

return result;
}

function _indent (count)
{
    var spaces = '';
    for (i=0; i<=count; i++)
    {
        spaces += ' &nbsp;&nbsp;&nbsp;';
    }
    return spaces;
}

// This is called when a item name is clicked,
// either flipping it open or closed

//original johngaa 11/23/99
//highlight netscape bug fix
//original function flip(id)
function flip(id,xoffset,yoffset)
{
    //johngaa 11/23/99
    //highlight netscape bug fix
    XD_gsYOffset = yoffset;
    XD_gsXOffset = xoffset;

    //end of johngaa add
    XDresetSelected();

    // before closing, check to see if it has selected children.

```

```

// If child is selected, then do not allow to close dir.
if (!XDopenChild(grove.index[id], 0))
{
    if (grove.index[id].attributes.show == 1)
    {
        grove.index[id].attributes.show = 0;
    }
    else
    {
        grove.index[id].attributes.show = 1;
    }
}

BuildExplorer(grove,XD_gsRootDirectory);
}

// This is called when an item icon is clicked, causing
// it to toggle between selected and not selected

//original johngaa 11/22/99
//highlight netscape bug fix
//function XDselectToggle(id)
function XDselectToggle(id,xoffset,yoffset)
{

    //johngaa 11/22/99
    //highligt bug fix
    XD_gsYOffset = yoffset;
    XD_gsXOffset = xoffset;
    //end of johngaa bug fix

    // Martin to solve bug where we log in and we get the error grove.index
    // is not an object
    if (! grove.index)
    {
        return;
    }

    if (id>=0)
    {
        XDresetSelected();

        if (grove.index[id].attributes.selected)
        {
            grove.index[id].attributes.selected = false;
        }
        else
        {
            XDresetAllSelected();
            XD_gnSelectedCount++;
            grove.index[id].attributes.selected = true;
            if (grove.index[id].attributes.folder)
            {
                XD_gnSelectedFolderCount++;
                grove.index[id].attributes.show = 1;
            }
        }
    }
}

```

```

        else
        {
            XD_gnSelectedFileCount++;
        }
    }
else
{
    XDresetAllSelected();
}
//if this is the page generated directly after a login
//make XDrive the default and select it
//then reset variable so we no longer select Xdrive as the default
if (XD_gnLogin==1)
{
    grove.index[0].attributes.selected=true;
    XD_gnLogin=0;
}

//this is called every time the file explorer changes
//including creates, moves, deletes and renames
//use a setTimeout for NS on NT because otherwise the
//browser crashes if there is no wait period
setTimeout("BuildExplorer(grove,XD_gsRootDirectory)",50);
//BuildExplorer(grove,XD_gsRootDirectory);

}

// function to check to see if the root is selected
function XDRootSelected()
{
    if (grove.index[0].attributes.selected)
    {
        return true;
    }
    return false;
}

// This sets a selection to a value
function XDselect (id,value)
{
    // Martin to solve bug where we log in and we get the error grove.index
    // is not an object
    if (!grove.index)
    {
        return;
    }

    if (grove.index[id].attributes.folder)
    {
        grove.index[id].attributes.selected = true;
        grove.index[id].attributes.show = value;
    }
}

```

```

// DeSelects everything if so that only one thing can be selected
// at a time, unless the the multipleSelect checkbox from myFrom
// is selected.
function XDresetAllSelected()
{
    var length = grove.index.length;

    for (var i =0; i < length; i++)
    {
        grove.index[i].attributes.selected = 0;
    }
}

function XDresetAllMovedSelected()
{
    // Martin bug fix -- after the first login could not show X:drive
    if (!grove.index)
    {
        return;
    }

    var length = grove.index.length;

    var oFrame = XD_goFrameUsageInfo;
    for (var i =0; i < length; i++)
    {
        grove.index[i].attributes.move = 0;
    }
}

// resets the number of selected, called by both flip and XDselectToggle
function XDresetSelected()
{
    XD_gsSelectedList = '';
    XD_gnSelectedCount = 0;
    XD_gnSelectedFolderCount =0;
    XD_gnSelectedFileCount =0;
    XD_gsSelectedFolderList = "";
}

function strip(str)
{
    var A = new Array();

    A = str.split("\n");
    str = A.join("");
    A = str.split(" ");
    str = A.join("");
    A = str.split("\t");
    str = A.join("");

    return str;
}

function entity(str)

```

```

{
var A = new Array();

A = str.split("&");
str = A.join("&lt;");
A = str.split("<");
str = A.join("<"); 
A = str.split(">"); 
str = A.join(">");

return str;
}

function synch (prev_grove, new_grove)
{
    var prev_tag, new_tag, pi, ni;

    if (! prev_grove)
    {
        //set a flag so we know the first time a user logs in
        //there will be no prev_grove in this one case
        //flag is used to show blue bar on XDrive folder only right after logging
in
        XD_gnLogin=1;
        return;
    }

//NS4.05 doesn't like this syntax
//change to new syntax
//if (! prev_grove.attributes)
    if (prev_grove.attributes!="")
    {
        return;
    }

    if (! new_grove.contents)
    {
        return;
    }

    if (prev_grove.attributes.show)
    {
        pi = 0;

        for (var ni = 0; ni < new_grove.contents.length; ni++)
        {
            if (new_grove.contents[ni].type == "element")
            {
                if (prev_grove.contents[pi])
                {
                    prev_tag = prev_grove.contents[pi];
                }

                if (new_grove.contents[ni])
                {
                    new_tag = new_grove.contents[ni];
                }
            }
        }
    }
}

```

```
        if ((prev_tag) && (new_tag))
        {
            if (prev_tag.name == new_tag.name)
            {
                // Make sure the contents for this object
exists before checking them
                // to avoid javascript "has no properties"
errors.
                if (prev_grove.contents[pi])
                {
                    new_grove.contents[ni].attributes =
prev_grove.contents[pi].attributes;
                }
                else if (prev_tag.name > new_tag.name)
                {
                    pi++;
                }
                else
                {
                    ni++;
                }
            }
            synch(prev_grove.contents[pi], new_grove.contents[ni]);
        }
        pi++;
    }
}
```

## //saveToXdrive.js

```
var win = external.menuArguments;

ExtMen = external.menuArguments;
ExtMenTag = ExtMen.event.srcElement;
ExtMenDoc = ExtMen.document;

var url;

function findAnchor(el) {

    while ((el!=null) && ((el.tagName!="A") && (el.href!="")))
        el = el.parentElement;
    return el;
}

function findUrl() {
    var re;
    var IMGinsideLink = false;

    //alert("Tag name is " + ExtMenTag.tagName);

    switch ( ExtMenTag.tagName ) {
        // if a "LINK", return the link's URL
        case "A" :
            url = ExtMenTag.href;
            break;

        case "TD":
            var el = win.document.selection.createRange();
            a = findAnchor(el.parentElement(0));
            if (a != null)
                {
                    url = a.href;
                }
            break;

        // if it was an image, then this gets complicated:
        case "IMG" :

            // check all links to make sure we aren't in one:
            for ( count = 0; count < ExtMenDoc.links.length; count++ )
                if ( ExtMenDoc.links( count ).contains( ExtMenTag ) ) {
                    IMGinsideLink = true;
                    break;
                }

            // if none was found, return the image URL:
            if ( !IMGinsideLink )
                url = ExtMenTag.src;
```

```

else {
    url = ExtMenDoc.links( count ).href;
}
break;

default:
    url = ExtMenDoc.href;
    break;
}

// Replace "."
re = /%2e/g;
url = url.replace(re, ".");

// Replace ":"
re = /%3A/g;
url = url.replace(re, ".");

// See if from hotfiles ZD-Net
if (url.indexOf("hotfiles.zdnet") != -1)
{
    var startIndex;
    var endIndex;

    startIndex = url.indexOf("refresh_url=");
    if (startIndex != -1)
    {
        startIndex += 12;
        endIndex = url.indexOf("&", startIndex);

        if (endIndex != -1)
        {
            url = url.substring(startIndex, endIndex);
        }
    }
}
// see if from "download.com" C-Net
else if (url.indexOf("download.com") != -1)
{
    var indexHttp;
    var indexFtp;

    indexHttp = url.lastIndexOf("http://");
    indexFtp = url.lastIndexOf("ftp://");
    index = indexHttp;
    if (indexFtp > indexHttp)
        index = indexFtp;

    //alert( "index is " + index );

    if (index > 0)
    {
        var tempUrl;

        tempUrl = url.substr(index);
    }
}

```

```
        url = tempUrl;
    }
}

findUrl();

//alert("begin");
//alert(url);

// Call X:Drive to perform actual copy
xd_skip(url);
```

## //secure\_login.js

```
//  
// Written 12/1/99  
// Description:  
// Allow users to login securely from the start  
//  
  
function getState()  
{  
    //  
    //return the value of the checked item  
    //called by checkSubmit  
    //  
    var state;  
    if (document.Login.bSecurity[0].checked)  
    {  
        state = document.Login.bSecurity[0].value;  
    }  
    else  
    {  
        state = document.Login.bSecurity[1].value;  
    }  
    return state;  
}  
  
function checkSubmit()  
{  
    //  
    // checks if secure toggle button is pressed or not  
    // if it is don't allow the submition of the current  
    // form but submit the secureLogin form  
    //  
    if (getState() == "on")  
    {  
        document.secureLogin.user.value = document.Login.user.value;  
        document.secureLogin.pass.value = document.Login.pass.value;  
        document.secureLogin.submit();  
        return false;  
    }  
    else  
    {  
        return true;  
    }  
    return false;  
}  
  
function writeForm()  
{  
    //  
    // creates a the secure form  
    //  
    var fullHostName = XDGetFullHostName();  
    var cgiAction = "https://" + fullHostName + "/cgi-bin/login.cgi";
```

```
var formStr;

formStr = "<form name=\"secureLogin\" method=\"post\" action=\"\"";
formStr += cgiAction;
formStr += "\">>";

formStr += "<input type=\"hidden\" name=\"user\" value=\"\">>";
formStr += "<input type=\"hidden\" name=\"pass\" value=\"\">>";
formStr += "<input type=\"hidden\" name=\"bSecurity\""
value="on">\n</form>";
document.writeln(formStr);

}

function clickSecureState()
{
    var tempL = new String(document.location);
    var start = -1;
    start = tempL.indexOf("https");
    if (start != -1)
    {
        if (document.Login.bSecurity[0].value == "on")
        {
            document.Login.bSecurity[0].click();
        }
        else
        {
            document.Login.bSecurity[1].click();
        }
    }
}
```

## //skip.js

```
*****  
// xd_skip: Popup a skip the download window for the X:Drive skip  
// the download service.  
//  
// Inputs:  
//   file_url  : the absolute URL of the file to fetch  
//   file_name : the name to call the stored file  
//   file_size : the file size in KB  
//  
// Outputs:  
//   none  
*****  
  
var skipPartner;  
var skipLanguage;  
var height = 200;  
var width = 575;  
  
function xd_change_location (url)  
{  
    document.location=url;  
}  
  
function xd_skip(file_url,file_name,alt_url,catid,gid,sid,langauge,partner)  
{  
  
    var base_url = "http://www.xdrive.com/cgi-bin/skip_the_download.cgi";  
  
    if (! file_name || file_name.length == 0)  
    {  
        var ii;  
        for (ii=0; ii<= file_url.length; ii++)  
        {  
            if (file_url.charAt(ii) == '/')  
            {  
                file_name = '';  
            }  
            else  
            {  
                file_name = file_name + file_url.charAt(ii);  
            }  
        }  
    }  
  
    var params = "FILEURL=" + escape(file_url) +  
    "&FILENAME=" + escape(file_name) +  
    "&ALTURL=" + escape(alt_url);  
  
    if (langauge) {  
        skipLangauge = langauge;  
    }  
}
```

```

if (partner) {
    skipPartner = partner;
}

if (skipPartner)
{
    params = params + "&STDPARTNER=" + escape(skipPartner);
}

if (skipLanguage)
{
    params = params + "&LANG=" + escape(skipLanguage);
}

if (catid)
{
    params = params + "&CATID=" + escape(catid);
}

if (gid)
{
    params = params + "&GID=" + escape(gid);
}

if (sid)
{
    params = params + "&SID=" + escape(sid);
}

if(skipPartner == 'cnet')
{
    height = 235;
    width = 600;
}

url = base_url + "?" + params;
var d = new Date();
var name = d.getTime();

window.open
(
    url,
    name,
    'toolbar=no,menubar=no,scrollbars=no,fullscreen=no,resizable=no,width='
+ width + ',height=' + height
);

return;
}

```

## //skipthedownload.js

```
<SCRIPT LANGUAGE="JavaScript" SRC="http://www.xdrive.com/js/skip.js"></SCRIPT>
<SCRIPT LANGUAGE="JavaScript" defer>

var win = external.menuArguments;

ExtMen = external.menuArguments;
ExtMenTag = ExtMen.event.srcElement;
ExtMenDoc = ExtMen.document;

var url;

function findAnchor(el) {

    while ((el!=null) && ((el.tagName!="A") && (el.href!="")))
        el = el.parentElement;
    return el;

}

function findUrl() {
    var re;
    var IMGinsideLink = false;

    //alert("Tag name is " + ExtMenTag.tagName);

    switch ( ExtMenTag.tagName ) {
    // if a "LINK", return the link's URL
    case "A" :
        url = ExtMenTag.href;
        break;

    case "TD":
        var el = win.document.selection.createRange();
        a = findAnchor(el.parentElement(0));
        if (a != null)
            {
            url = a.href;
            }
        break;

    // if it was an image, then this gets complicated:
    case "IMG" :

        // check all links to make sure we aren't in one:
        for ( count = 0; count < ExtMenDoc.links.length; count++ )
            if ( ExtMenDoc.links( count ).contains( ExtMenTag ) ) {
                IMGinsideLink = true;
                break;
            }
    }

    return url;
}
```

```

// if none was found, return the image URL:
if ( !IMGinsideLink )
    url = ExtMenTag.src;
else {

    url = ExtMenDoc.links( count ).href;
}
break;

default:
    url = ExtMenDoc.href;
    break;
}

// Replace "."
re = /%2e/g;
url = url.replace(re, ".");

// Replace ":"
re = /%3A/g;
url = url.replace(re, ".");

// See if from hotfiles ZD-Net
if (url.indexOf("hotfiles.zdnet") != -1)
{
    var startIndex;
    var endIndex;

    startIndex = url.indexOf("refresh_url=");
    if (startIndex != -1)
    {
        startIndex += 12;
        endIndex = url.indexOf("&", startIndex);

        if (endIndex != -1)
        {
            url = url.substring(startIndex, endIndex);
        }
    }
}
// see if from "download.com" C-Net
else if (url.indexOf("download.com") != -1)
{
    var indexHttp;
    var indexFtp;

    indexHttp = url.lastIndexOf("http://");
    indexFtp = url.lastIndexOf("ftp://");
    index = indexHttp;
    if (indexFtp > indexHttp)
        index = indexFtp;

    //alert( "index is " + index );

    if (index > 0)
    {

```

```
var tempUrl;  
  
    tempUrl = url.substr(index);  
    url = tempUrl;  
}  
}  
  
}  
  
findUrl();  
  
//alert("begin");  
//alert(url);  
  
// Call X:Drive to perform actual copy  
  
xd_skip(url);  
  
</script>
```

## //submit.js

```
*****  
* Submit.JS: This javascript class is for all the actions associated with  
* buttons. This class may either open a new window or submit an existing  
* form for server parsing.  
*****  
  
*****  
* XDCheckFormInput() - check upload/ rename/ create input.  
* if there are errors, give then alert. if not, submit  
*****  
  
function XDCheckFormInput()  
{  
    //make sure user is not allowed to upload a blank file  
    if (XD_gsAction == 'Upload')  
    {  
        sFormName = XD_goFrameFileExplorer.document.form_upload;  
        if(sFormName.file_to_upload_01.value == '')  
        {  
            alert(XD_gsAlertUploadEmptyFile);  
            return false;  
        }  
    }  
    //make sure user cannot create a blank file  
    else if (XD_gsAction == 'Create')  
    {  
        sFormName = XD_goFrameFileExplorer.document.form_create;  
        if (sFormName.sFolderNew.value=='')  
        {  
            alert(XD_gsAlertCreateEmptyFile);  
            return false;  
        }  
    }  
    else if (XD_gsAction == 'Rename')  
    {  
        sFormName = XD_goFrameFileExplorer.document.form_rename;  
        //do not allow user to rename file the same name it already has  
        //find just the file name to compare to what was input  
  
        var lastSlash=sFormName.sItemCurrent.value.lastIndexOf('/');  
  
        //if this is a folder of user may edit file extensions, use this  
        code  
        if ((parent.parent.XDProfileEditExtensions) ||  
        (XD_gnSelectedFileCount==0))  
        {  
            //allow user to edit extensions so check everything after the  
            //last slash  
            var  
            fileName=sFormName.sItemCurrent.value.substring(lastSlash+1,sFormName.sItemCurre  
nt.value.length);  
    }
```

```

        if (fileName == sFormName.sItemNew.value)
        {
            alert(XD_gsAlertRenameSameName);
            return false;
        }
    }
else
{
    //do not allow user to edit extensions so need to find last
'.' as well
    var lastDot=sFormName.sItemCurrent.value.lastIndexOf('.');
    var
fileName=sFormName.sItemCurrent.value.substring(lastSlash+1,lastDot);

    if (fileName == sFormName.sItemNew.value)
    {
        alert(XD_gsAlertRenameSameName);
        return false;
    }
}

//check to see if user is trying to name the file/folder nothing
//give em an error message if so
if (sFormName.sItemNew.value == '')
{
    alert(XD_gsAlertRenameNothing);
    return false;
}
else { }

XD_gsAction = '';
//sFormName.submit();
return true;
}

function XDSubmitView (sFormName) {
// Always start by checking the status and if the status is not active then
// return and do not perform any actions.
//if (! XDfunctionStatus(parent.parent.XD_TOOLBAR_BUTTON_VIEW))

if (! XDfunctionStatus(XD_TOOLBAR_BUTTON_VIEW)) {
    return false;
}

var sFixed = '';
var sFileName = XDSelected();

for (i = 0;i <= sFileName.length;i++) {
    if (sFileName.charAt(i) == ' ') {
        sFixed += '+';
    }
    else {
        sFixed += sFileName.charAt(i);
    }
}
}

```

```

// URL encode/escape string
sFixed = escape(sFixed);

var sURL = '/cgi-bin/file_load.cgi?'+sFixed+'&sFileCurrent=' + sFixed +
"&source=www.fileExplorer.view";

XDReaderShow(sURL,400,400);
return true;
}

// Justin's upload status stuff.
function openUpload(form_check, url, name, f) {

if (! form_check) {
    return false;
}

var form_length = f.length;
var cnt = 0;

for(var i = 0; i < f.length; i++) {
    var e = f.elements[i];

    if ( (e.type == "file") && (e.value.length > 0) ) {
        cnt++;
    }
}

var amp_nof = "&nof=";
url += amp_nof + cnt;

msgWindow =
window.open(url,name,'width=350,height=190,toolbar=no,resize=no,scrollbars=no');

return true;
}

function createRandomID () {
substr_rand_num = new String(Math.random());

return substr_rand_num.substring(2,14);
}

function XDSubmitDownload ()
{
    // Always start by checking the status and if the status is not
    // active then return and do not perform any actions.
    //if (! XDfunctionStatus(parent.parent.XD_TOOLBAR_BUTTON_DOWNLOAD))
    if (! XDfunctionStatus(XD_TOOLBAR_BUTTON_DOWNLOAD))
    {
        return false;
    }

    var sFileName = XDSelected();
    var oDocument = XD_goFrameData.document;
    var sExtraPath;
}

```

```

sExtraPath = '/' + sFileName;

HTMLGenericStart(oDocument);
oDocument.write('<form name="form_download" target="userData"
method="POST" action="/cgi-bin/file_load.cgi' + sExtraPath + '"'
enctype="multipart/form-data">' + "\n");
    oDocument.write('<input type="hidden" name="sFileCurrent"
value="' + sFileName + '">' );
    oDocument.write('<input type="hidden" name="mime" value="download">');
    oDocument.write('<input type="hidden" name="source"
value="www.fileExplorer.download">');
    oDocument.write('<input type="hidden" name="sFolderCurrent" value="' +
XDSelectedFolder() + '">');
    //johngaa test add 12/2/99
    oDocument.write('</form>');
    //end of johngaa add
HTMLGenericEnd(oDocument);
oDocument.forms[0].submit();
return true;
}

function XDSubmitNewFolder(sFormName)
{
    var sNewFolderName = prompt(XD_gsRenamePrompt);
    XDFormSetGeneric(sFormName);
    XDFormSetFolderNew(sFormName, sNewFolderName);
    sFormName.submit();
}

/*****************
 * XDItemDelete: Delete an item (no prompting here)
*****************/
function XDItemDelete()
{
    var sFileName = XDSelectedList();
    XDFormSetGeneric(sFormName);
    XDFormSetThingName(sFormName);
    sFormName.submit();
}

/*****************
 * XDSUBMITDELETE: Verify they can delete the selected item and then
 *      redirect to a web page that will prompt them to delete.
*****************/
function XDSUBMITDELETE(sFormName)
{
    if (! XDAllowChange(XDSelected()))
    {
        alert(XD_gsAlertDeleteFolder);
        return false;
    }
    location = "delete_prompt.html";
    return true;
}

```

```

function XDBufferChange(sFormName,sType)
{
    // We popup a new window for them to select a folder from
    XDFormSetBufferAction(sFormName,sType);
    parent.parent.XDOpenFolderSelectWindow();
    XDFormSetSelectedFiles(sFormName);
}

function XDSubmitBufferChange (sFolderTo)
{
    // This method is being access across frames so we cannot easily pass the
    form name
    // so instead we set a variable equal to what the object would have been.
    sFormName = window.frames[XD_gsControlFrame].document.form_buffer;
    XDFormSetGeneric(sFormName);
    XDFormSetFolderNew(sFormName,sFolderTo);
    sFormName.submit();
}

function XDSubmitMove(sFormName)
{
    XDFrameMove();
    BuildExplorer(grove,XD_gsRootDirectory);
}

*****  

* XD PopupShow: Show a popup browser  

*****  

function XDReaderShow(sURL, nHeight, nWidth) {
    nWidth = 500;
    nHeight = 600;

    var r = window.open(sURL,"reader","location=no,toolbar=no,menubar=no,"+
        "status=no,resizable=yes,scrolling=yes,scrollbars=yes,"+
        "width='"+nWidth+"',height='"+nHeight+"');

    //*** make sure the opener knows who the parent is
    if (r.opener == null) r.opener = self;

    //*** focus on the newly created window
    //r.focus();
}

function FrameObject()
{
    return XD_goFrameFileExplorer.document;
}

function HTMLGenericStart (oDocument)
{
    oDocument.open("text/html");
    oDocument.write('<html>');
    oDocument.write("<head>\n");
}

```

```

oDocument.write("<link rel=stylesheet href='/css/style_back.css' type='text/css'>\n");
oDocument.write("</head>\n");
oDocument.write('<body background="' + XDBackgroundImage() + '" bgcolor="' + XDBackgroundColor() + '">+'\n");
oDocument.write('<table><tr>');
}

*****
* HTMLGenericEnd:
***** */

function HTMLGenericEnd (oDocument)
{
    oDocument.write('</table>');
    oDocument.write('</body>+'\n');
    oDocument.write('</html>+'\n');
    oDocument.close();
}

function XDBuildForm()
{
    var form = '';
    var sSubmitButton = '/images/submit.gif';

    if (XDAction('Move'))
    {
        form += '<form name="form_buffer" action="/cgi-bin/buffer_paste.cgi" +
                 method="POST" target="centerview"'+
                 parent.parent.parent.XDReset();">+'\n';
        form += '<input type="hidden" name="sFile" value="'+XD_gsMoveSelectedList+'>';
        sSubmitButton = '/images/move.gif';
        XD_gnFrameHeight = '40';
    }

    form += '<input type="hidden" name="sFolderCurrent" value="'+
XDSelectedFolder() + '"';
    form += '<input type="hidden" name="type" value="move">';
    form += '<input type="hidden" name="sItemCurrent" value="">';
    form += '<input type="hidden" name="sFolderNew" value="">';

    form += '<p><INPUT TYPE="button" VALUE="'+ XD_gsButtonSubmit + '" onClick="parent.parent.parent.XDSetMoveForm(document.forms[0]);">'+
'<INPUT TYPE="button" VALUE="'+ XD_gsButtonCancel + '" onClick="parent.parent.parent.XDReset(); parent.parent.parent.XDRefreshExplorer();">'+
'</td>';
    form += '</form>';

    return form;
}

function XDSetMoveForm (oForm)
{
    oForm.sItemCurrent.value = XDSelectedToMove();
}

```

```

oForm.sFolderNew.value = XDSelectedFolder();

// adding check for target folder
if (XD_gsSelectedFolderList.length > 0)
{
    //check to see if the user is attempting to move the file into
    //the folder it is already in - can't do that
    var slash=oForm.sItemCurrent.value.lastIndexOf("/");
    var fileDirectory=oForm.sItemCurrent.value.substring(0,slash);

    if (oForm.sFolderNew.value == fileDirectory)
    {
        alert(XD_gsAlertMoveSameFolder);
    }
    else
    {
        // makes sure that the target is not the same as
        // source
        if (oForm.sFolderNew.value == oForm.sItemCurrent.value)
        {
            alert(XD_gsAlertNoTargetFolder);
        }
        else
        {
            //call reset and submit form only if they can actually move the
            file
            //else they only get the dialog warning box
            XDReset();
            oForm.submit();
        }
    }
}
else
{
    alert(XD_gsAlertNoTargetFolder);
}

function XDFormSubmitButtons (generic)
{
    var HTMLString = '';
    var FormString = '';
    var TotalString = '';

    // Grab the appropriate HTML
    if (XDAction('Move'))
    {

        if (XD_gbExtraHelp)
        {
            HTMLString = XDHelp(XD_gsHelpMoveHTML);
        }

        FormString = XDBuildForm();
        return HTMLString + "</TD></TR><TR><TD>" + FormString;
    }
    else if (XDAction('Rename'))
}

```

```

        {
        if (XD_gbExtraHelp)
        {
            HTMLString = XDHelp(XD_gsHelpFolderRename);
        }
    }
    else if (XD_gbExtraHelp)
    {
        if (XD_gnSelectedCount > 0 && ! XDRootSelected())
        {
            if (XD_gnSelectedFileCount)
            {
                HTMLString = XD_gsHelpFileSelected;
            }
            else
            {
                HTMLString = XD_gsHelpFolderSelected;
            }
        }
        else
        {
            if (XD_gsFirstTime)
            {
                HTMLString = XD_gsHelpFirstTimeEnter;
            }
            else
            {
                HTMLString = XD_gsHelpEnter;
            }
        }
    }

    // Format the help box
    HTMLString = XDHelp(HTMLString);
}

if (! generic)
{
    var sSubmitButton;
    sSubmitButton = '/images/submit.gif';
    if (XDAction('Rename'))
    {
        sSubmitButton = XD_gsButtonRename;
    }
    else if (XDAction('Upload'))
    {
        sSubmitButton = XD_gsButtonUpload;
    }
    else if (XDAction('Create'))
    {
        sSubmitButton = XD_gsButtonCreate;
    }
    else if (XDAction('Delete'))
    {
        sSubmitButton = XD_gsButtonDelete;
    }
}

return '<p><input type="submit" value="'+sSubmitButton+'">\n'+
```

```

        '<input type=button value="' + XD_gsButtonCancel + '"'
        onclick="'+
            'parent.parent.parent.XDReset(); '+
            'parent.parent.parent.XDRefreshExplorer%;">\n</FORM>',
        }

    TotalString = HTMLString + FormString;
    return TotalString;
}

function XDHelp (sHelp)
{
    return '<tr><td height=50 bgcolor="' + XD_gsExplorerHelpBackgroundColor +
    '" colspan=3 valign=top><FONT FACE="arial, helvetica" size="-1" color="#666666"><b>' + XD_gsInstructions + '</b>\n' + sHelp + '\n</td></tr>';
}

/*
 * XDFrameShare: Share a file with another user
 */
function XDFrameShare()
{
    //if (! XDfunctionStatus(parent.parent.XD_TOOLBAR_BUTTON_SHARE))
    if (! XDfunctionStatus(XD_TOOLBAR_BUTTON_SHARE))
    {
        return false;
    }

    var sFile = XDEscapeCharacters(XDSelected());

    frames['centerview'].document.location = '/cgi-
bin/share_a_file.cgi?help=' +
        XD_gbExtraHelp + '&sFileName=' + sFile;
    return true;
}

function XDCheck (sName)
{
    return "if (! XDAllowChange(\"+sName+\")) {return false;}";
}

function XDSelectedThingName()
{
    var r = '';
    var s = XDSelected();
    for (var i=0; i<s.length;++i)
    {
        var ch=s.charAt(i);
        if (ch == '/')
        {
            r = '';
        }
        else

```

```

        {
            r += ch;
        }
    }
    return r;
}

function XDSelectedThingNameMinusExtension()
{
    var r = '';
    var b = false; // found first time
    var s = XDSelectedThingName();
    for (var i=s.length;i>=0;--i)
    {
        var ch=s.charAt(i);
        if (ch == '.' && ! b)
        {
            b = true;
            r = '';
        }
        else
        {
            r = ch + r;
        }
    }
    return r;
}

function XDSelectedThingNameExtension()
{
    var r = '';
    var s = XDSelectedThingName();
    var bFoundDot = false;
    for (var i=0;i<s.length;++i)
    {
        var ch = s.charAt(i);
        if (ch == '.')
        {
            r = '';
            bFoundDot = true;
        }
        else
        {
            r += ch;
        }
    }
    if (bFoundDot == true)
    {
        return '.'+r;
    }
    else
    {
        return '';
    }
}

*****
```

```

* XDFrameUpload: Refresh the action frame with a form to perform the file
* upload and set the form values during the HTML creation itself.
*****
```

```

function XDFrameUpload(sCurrentFolder)
{
    //if (! XDfunctionStatus(parent.parent.XD_TOOLBAR_BUTTON_UPLOAD))
    if (! XDfunctionStatus(XD_TOOLBAR_BUTTON_UPLOAD))
    {
        return false;
    }

    XDActionStart('Upload');
    XD_gnFrameHeight = '1';
    frames['centerview'].document.location = XDCenterView();
    return true;
}

function XDFrameFolderNew ()
{
    //if (!XDfunctionStatus(parent.parent.XD_TOOLBAR_BUTTON_NEWFOLDER) )
    if (!XDfunctionStatus(XD_TOOLBAR_BUTTON_NEWFOLDER) )
    {
        return false;
    }

    XDActionStart('Create');
    XD_gnFrameHeight = '1';
    frames['centerview'].document.location = XDCenterView();
    return true;
}

function XDFrameRename ()
{
    if (! XDAallowChange(XDSelected()))
    {
        alert(XD_gsAlertRenameFolder);
        return false;
    }
    //if (! XDfunctionStatus(parent.parent.XD_TOOLBAR_BUTTON_RENAME) )
    if (! XDfunctionStatus(XD_TOOLBAR_BUTTON_RENAME) )
    {
        return false;
    }

    XDActionStart('Rename');
    XD_gnFrameHeight = '1';
    frames['centerview'].document.location = XDCenterView();
    return true;
}

function XDFrameDeletePrompt()
{
    if (! XDAallowChange(XDSelected()))
    {
        alert(XD_gsAlertDeleteFolder);
        return false;
    }
}
```

```

}

//if (! XDfunctionStatus(parent.parent.XD_TOOLBAR_BUTTON_DELETE))
if (! XDfunctionStatus(XD_TOOLBAR_BUTTON_DELETE))
{
    return false;
}

XDActionStart('Delete');
XD_gnFrameHeight = '1';
frames['centerview'].document.location = XDCenterView();
return true;
}

*****  

* XDsetSelectedToMove: takes all files that are currently selected and sets  

* their move attribute  

*****  

*****  

function XDsetSelectedToMove(tag)
{
    if (tag.attributes.selected)
    {
        tag.attributes.selected = 0;
        tag.attributes.move = 1;
    }

    for (var i = 0; i < tag.contents.length; i++)
    {
        if (tag.contents[i].type == "element")
        {
            XDsetSelectedToMove(tag.contents[i]);
        }
    }
}

function XDFrameMove()
{
    if (! XDAllowChange(XDSelected()))
    {
        alert(XD_gsAlertMoveFolder);
        return false;
    }

    // XXX
    XD_gsMoveSelectedList = XD_gsSelectedList;
    XD_gsSelectedList = "";
    XDsetSelectedToMove(grove);

    XDActionStart('Move');
    XD_gnFrameHeight = '1';
    frames['centerview'].document.location = XDCenterView();

    return true;
}

```

```

*****  

* XDBrowserDownloadSupported: Returns true if the browser supports the  

* download button. This includes all Netscape versions and IE 5 or later.  

*****  

  

function XDBrowserDownloadSupported()  

{  

    return !((navigator.appName == "Microsoft Internet Explorer") &&  

            (parseInt(navigator.appVersion) <= 4 ));  

}  

  

function XDProfile(form)  

{  

    XDProfileEditExtensions = form.elements['bFileExtEdit'].checked;  

    XD_gbExtraHelp = form.elements['bExtraHelp'].checked;  

    XD_gbMarketing = form.elements['bMarketing'].checked;  

    XD_gbNewsletter = form.elements['bNewsletter'].checked;  

}  

  

function XDLogout()  

{  

    var sUrl = '/cgi-bin/logout.cgi';  

    parent.parent.location.href = sUrl;  

}  

  

*****  

* XDSelected: Return the currently selected file or folder and remove the  

* plus that appears at then end -- used the separate elements in a multi  

* file/folder list.  

*****  

  

function XDSelected()  

{  

    return XD_gsSelectedList.substring(0,XD_gsSelectedList.length-1);  

}  

  

function XDSelectedFolder()  

{  

    alert(XD_gsLengthofFolder + XD_gsSelectedFolderList.length);  

    return XD_gsSelectedFolderList.substring(0,XD_gsSelectedFolderList.length-  

1);  

}  

  

function XDSelectedToMove()  

{  

    return XD_gsMoveSelectedList.substring(0,XD_gsMoveSelectedList.length-  

1);  

}  

  

*****  

* XDCleanupPath: Cleanup the passed path by removing the "/X:drive/" prefix  

* and the + postfix.  

*****  

  

function XDPathCleanup(sPath)  

{  

    var sCopy = sPath;

```

```

sCopy = sCopy.substring(9,sCopy.length)
//sCopy = sCopy.substring(0,sCopy.length-1);
return sCopy;
}

function XDDomain ()
{
    baseAddress = java.net.InetAddress.getLocalHost();
    userDomain = baseAddress.getHostName();
    alert(userDomain.toString());
}

function XDXdrive ()
{
    XDDomain();
    return '/cgi-bin/explorer_user_data.cgi';
}

function XDCenterView ()
{
    return '/cgi-bin/frame_generic.cgi?thtml=centerview.thtml&sFrameHeight='
+ XD_gnFrameHeight;
}

function XDRestart ()
{
    XD_gnSelectedCount = 0;
    XD_gnSelectedFileCount = 0;
    XD_gnSelectedFolderCount = 0;
    XD_gsSelectedList = "";
    XD_gnSelectedFolderID = '';
    XD_gsMoveSelectedList = "";
    XD_gsSelectedFolderList = "";
    XD_gsTargetFolder = "";
    ControlsEnabled = true;
    XDresetAllMovedSelected();
    XDActionEnd();
}

function XDAuthorize (sFolder)
{
    if (sFolder == '' || sFolder == 'public' || sFolder ==
'private')
    {
        return false;
    }
    return true;
}

function XDAction (sAction)
{
    if (XD_gsAction == sAction)
    {
        return true;
    }
    return false;
}

```

```

// Register a new action
function XDActionStart (sAction)
{
    XD_gsAction = sAction;
}

// Clear the current action
function XDActionEnd ()
{
    XD_gsAction = '';
}

function XDRefreshExplorer()
{
    //reset the action before calling this function
    //or the action screen will be drawn
    XDActionEnd();
    XD_gnFrameHeight = '40';
    //also reset if a move has been started but never finished
    XDresetAllMovedSelected();
    frames['centerview'].document.location=XDCenterView();
}

function XDGetButtonFrameHeight(oDocument)
{
    oDocument.open("text/html");
    oDocument.write(XD_goButtonFrameHeight);
    oDocument.close();
}

function XDSetButtonFrameHeight(height)
{
    XD_gnButtonFrameHeight=height;
}

*****  

** XDRefreshBanner: Refresh the banner with a new advertisement.  

*****  

function XDRefreshBanner()
{
    if (XDBannerOn())
    {
        frames['banner'].document.location = '/cgi-bin/ads.cgi';
        // WIP: parent 3 twice removed (from the above line)
    }
}

*****  

** XDBannerOn: Return true if we should display the banner.  

*****  

function XDBannerOn()
{
    if (XD_gsPartner == 'xdrv')
    {

```

```
        return true;
    }
else
{
    return false;
}
}

function XDTellAFriend()
{
    var sUrl = '/cgi-
bin/tell_a_friend.cgi?numFriends='+XD_gnNumFriendsToTell;
    frames['centerview'].document.location=sUrl;
}

function XDAddSpace()
{
    var sUrl = '/cgi-bin/addspace.cgi?action=intro';
    frames['centerview'].document.location=sUrl;
}

function XDDownloadClient()
{
    var sUrl = '/cgi-bin/download_client.cgi';
    frames['centerview'].document.location=sUrl;
}
```

## //uploadStatus.js

```
<!--

function openUpload(form_check, url, name, f) {
    if (! form_check) {
        return false;
    }

    var form_length = f.length;
    var cnt = 0;

    for(var i = 0; i < f.length; i++) {
        var e = f.elements[i];

        if ( (e.type == "file") && (e.value.length > 0) ) {
            cnt++;
        }
    }

    var amp_nof = "&nof=";
    url += amp_nof + cnt;

    msgWindow =
    window.open(url,name,'width=350,height=190,toolbar=no,resize=no,scrollbars=no');

    return true;
}

function createRandomID () {
    substr_rand_num = new String(Math.random());

    return substr_rand_num.substring(2,14);
}

//-->
```

## //utils.js

```
*****  
* XDFormSetThingName: Set the name for the thing in the passed form.  
*****  
  
function XDFormSetThingName(sFormName)  
{  
    sFormName.sThingName.value = XDSelectedList();  
}  
  
function XDFormSetBufferAction(sFormName,sType)  
{  
    sFormName.type.value = sType;  
}  
  
function XDFormSetFolderCurrent(sFormName)  
{  
    sFormName.sFolderCurrent.value = XDSelectedFolder();  
}  
  
function XDFormSetSelectedFiles (sFormName)  
{  
    sFormName.sFile.value = XDSelectedList();  
}  
  
function XDFormSetFolderNew(sFormName,sFolderNameNew)  
{  
    sFormName.sFolderNew.value = sFolderNameNew;  
}  
  
*****  
* XDFormSetThingOld: Set the old name attribute for the rename CGI.  
*****  
  
function XDFormSetThingOld(sFormName,sThingName)  
{  
    sFormName.sThingNameOld.value = sThingName;  
}  
  
*****  
* XDFormSetThingNew: Set the new name attribute for the rename CGI.  
*****  
  
function XDFormSetThingNew(sFormName,sThingName)  
{  
    sFormName.sThingNameNew.value = sThingName;  
}  
  
function XDFormSetGeneric(sFormName)  
{  
    XDFormSetFolderCurrent(sFormName);  
}  
*****
```

```

* XDPopupShow: Show a popup browser
***** */

function XDPopupShow(
    sURL, //*** (I) The URL to open in the popup window
    nHeight, //*** (I) The height of the popup
    nWidth) //*** (I) The width of the popup
{
    var w = window.open(sURL,"viewer","location=no,toolbar=no,menubar=no,"+
        "status=no,resizable=yes,scrolling=yes,scrollbars=no,"+
        "width='"+nWidth+"',height='"+nHeight+"');

    //*** make sure the opener knows who the parent is
    if (w.opener == null) w.opener = self;

    //*** focus on the newly created window
    w.focus();
}

function XDSelectedList()
{
    return XD_gsSelectedList;
}

function XDBackgroundColor()
{
    return XD_gsExplorerBackgroundColor;
}

function XDBackgroundImage()
{
    return XD_gsBackgroundImage;
}

function XDSelectedFolder()
{
    return XD_gsSelectedFolderList.substring(0,XD_gsSelectedFolderList.length-
1);
}

***** */
* XDCleanupPath: Cleanup the passed path by removing the "/X:drive/" prefix
* and the + postfix.
***** */

function XDPATHCleanup(sPath)
{
    var sCopy = sPath;
    sCopy = sCopy.substring(9,sCopy.length)
        //sCopy = sCopy.substring(0,sCopy.length-1);
    return sCopy;
}

function XDMultiSelect (sValue)
{
    if (sValue != 'null' & sValue != "")
    {
        m_sMultiSelect = sValue;
    }
}

```

```

        }
    else
    {
        return m_sMultiSelect;
    }
}

function HTMLNavigation ()
{
    var sHTML = HTMLStart()
        +'<table width="100%" border="0" cellspacing="0"
cellpadding="0">'
        +'<tr align="left" valign="top" bgcolor="#5EB114">'
        +'<td></td>'
        +'</tr><tr>'
        +'<td></td>'
        +'</tr><tr>'
        +'<td></td>'
        +'</tr></table>'
        +'<a target="toolbar" href="http://www.mit.edu">MIT</a>'
        +'</BODY>\n</HTML>';
    return sHTML;
}

function HTMLStart ()
{
    return "<HTML>\n"
    +'<body bgcolor="#6961AB" topmargin="0" leftmargin="0" marginheight="0"
marginwidth="0" text="#FFFFFF" link="#FFFFFF" {onload}>"
    +"\n";
}

function HTMLEnd ()
{
    return "\n</BODY>\n</HTML>\n";
}

function RedrawToolBar()
{
    var sWindow = 'window.toolbar';
    sWindow.document.write(HTMLStart()+'test'+HTMLEnd());
}

function XDEscapeCharacters (str)
{
    var A = new Array();

    A = str.split("+");
    str = A.join("%2B");

    A = str.split(" ");
    str = A.join("+");

    A = str.split("%");
}

```

```
str = A.join("%25");
A = str.split("&");
str = A.join("%26");
return str;
}
```

## //verify\_lib.js

```
<!-- Begin Hiding from older browsers

*****  
*** Javascript library of functions commonly  
*** used in HTML forms.  
*****  
  
validateForm(form)  
    attaches to the submit button and takes the  
    form as an argument. Validates all the  
    fields and will only let the form be submitted  
    if all the fields validate.  
  
checkForm()  
    attaches to nothing. Is used by the script  
    internally to allow compel() to function w/o  
    calling alert(), which would cause an infinite  
    loop.  
  
requireElements(num)  
    attaches to onLoad to initialize the array  
    of required fields in the form.  
  
addRequiredElements()  
    attaches to nothing. Is used internally to  
    construct a array of the names of all the  
    required fields in a form. For this to work  
    the form needs a "requiredElements" hidden  
    input tag. It should be of this format:  
  
<INPUT TYPE="hidden" NAME="requiredElements" VALUE=" name:email;">  
  
List the required field names in order that  
they appear in the form. End each name with  
a ':' and lead the whole value with a blank  
space. If this tag is not used, then  
validateRequiredElements will identify a  
missing required field by its number in lieu  
of the name.  
  
compel(textfield)  
    attaches to an onBlur event on a textfield.  
    This causes focus to be kept on a textfield  
    until checkForm() determines that they user  
    has filled it out correctly.  
  
required(textfield, num)  
    attached to an onBlur of a field is required.  
    The number is it's location on the  
    required_elements array. i.e.  
  
<INPUT TYPE="text" NAME="name" onBlur="required(this, 0)">
```

This tag declairs "name" as the first required field in the form.

```
validatePhone(textfield)
    attaches to an onChage of a textfield. This
    function validates to true only if the
    textfield is blank or contains only
    0-9, -, (, or )

validateEmail(textfield)
    attaches to an onChage of a textfield. This
    function validates to true only if the
    textfield is blank or contains an @

validateDate(textfield)
    attaches to an onChage of a textfield. This
    function validates to true only if the
    textfield is blank or contains a date in
    the format DD-MON-RRRR

validateDate_old(textfield)
    attaches to an onChage of a textfield. This
    function validates to true only if the
    textfield is blank or contains a date in
    the format DD/MM/YY

validateNum(textfield)
    attaches to an onChage of a textfield. This
    function validates to true only if the
    textfield is blank or contains a number
    between -1 and infinity

validateMoney(textfield)
    attaches to an onChage of a textfield. This
    function validates to true only if the
    textfield is blank or contains a number
    between with two decimal places (ie 2.56)

confirmDelete(textfield)
    attaches to an onClick on a submit button
    used as a delete button that you want the
    user to confirm before engaging.

reset_b()
    attaches to an onClick on a submit button.
    If you have a reset button, used confirmDelete
    or have a button that needs to override the
    validity of the form, this function should
    be attached to these buttons to allow them
    to function.
```

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*****
```

```
emailOK = true;
phoneOK = true;
dateOK = true;
```

```

lengthOK = true;
all_numOK = true;
all_moneyOK = true;
deleteOK = true;
yearOK = true;
required_elements = new Array();
required_elements_names = new Array();
blurred = "";
in_required = false;
submitted = false;
var submitCount;

function validateForm(form) {
    addRequiredElements(form);
    if (!emailOK) {
        alert(XD_gsValidateEmail);
        return false;
    } else if (!phoneOK) {
        alert(XD_gsValidatePhone);
        return false;
    } else if (!dateOK) {
        alert(XD_gsValidateDate);
        return false;
    } else if (!lengthOK) {
        alert(XD_gsValidateLength);
        return false;
    } else if (!all_numOK) {
        alert(XD_gsValidateNumber);
        return false;
    } else if (!all_moneyOK) {
        alert(XD_gsValidateMoney);
        return false;
    } else if (!yearOK) {
        alert(XD_gsValidateYear);
        return false;
    } else if (!deleteOK) {
        return false;
    } else if (!validateRequiredElements()) {
        return false;
    }
}

function compel (textfield) {
    if (blurred == "") {
        blurred = textfield;
    }
    if (!checkForm()) {
        blurred.focus();
        blurred.select();
    }
    if (checkForm() && !in_required) {
        blurred = "";
    }
}

function checkForm() {

```

```

        if(!emailOK) {
            return false;
        } else if(!phoneOK) {
            return false;
        } else if(!dateOK) {
            return false;
        } else if(!lengthOK) {
            return false;
        } else if(!all_numOK) {
            return false;
        } else if(!all_moneyOK) {
            return false;
        } else if(!yearOK) {
            return false;
        } else if(!deleteOK) {
            return false;
        } else {
            return true;
        }
    }

function requireElements(num) {
    var i;
    for (i=0; i < num; i++) {
        required_elements[i] = false;
    }
}

function addRequiredElements(form) {
    var found = false;
    for (var n=0; n < form.length; n++) {
        if (form.elements[n].name == "requiredElements") {
            found = true;
        }
    }
    if (found) {
        var length = form.requiredElements.value.length;
        var start_index = 0;
        var end_index = 0;
        var num = 0;
        for (var i=0; i < length; i++) {
            var theChar = form.requiredElements.value.charAt(i);
            if (theChar == ":") {
                start_index = end_index + 1;
                end_index = i;
                var string =
form.requiredElements.value.substring(start_index, end_index);
                num = required_elements_names.length;
                required_elements_names[num] = string;
            } // end of if ":" 
        } //end for loop
    } // end of found
}

```

```

//check to see if the year is a 4-digit value greater than 1900
function validateYear(textfield)
{
    yearOK = true;

    //make sure the file contains only numbers
    for (var n=0; n < textfield.value.length; n++)
    {
        var theChar = textfield.value.charAt(n);
        if ((theChar >= "0") && (theChar <= "9"))
        {
            //do nothing, assume it's still true
        }
        else
        {
            //contains non numeric elements
            yearOK=false;
        }
    }

    if (!yearOK)
    {
        alert(XD_gsValidateContainNums);
    }

    if (textfield.value < 1900)
    {
        yearOK = false;
        alert(XD_gsValidateGreater1900);
    }

    if (textfield.value.length != 4)
    {
        yearOK = false;
        alert(XD_gsValidateFourDigits);
    }
}

// Checks for a properly formated email
function validateEmail(textfield)
{
    emailOK = true;

    if ((textfield.value == "") || (textfield.value.indexOf("@") < 0))
    {
        emailOK = false;
        alert(XD_gsValidateEmailFormat);
        return false;
    }
    return true;
}

function required(textfield, num)
{

```

```

var alert_show = false;
in_required = true;
if (blurred == "")
{
    alert_show = true;
    blurred = textfield;
}

if(textfield.type == "select-one")
{
    //if the first option is chosen, assume that is not a real
    //choice, simply a default
    if (textfield.selectedIndex == 0)
    {
        if (alert_show)
        {
            alert(XD_gsValidateField + textfield.name +
XD_gsValidateRequired);
        }
        blurred.focus();
        blurred.select();
        required_elements[num] = false;
    }//end if selectedIndex empty
    else if (textfield.selectedIndex > 0)
    {
        blurred = "";
        required_elements[num] = true;
        in_required = false;
    }//end else

}//end select-one

if (textfield.type == "text" || textfield.type == "textarea" ||
textfield.type == "password")
{
    if(textfield.value.length==0)
    {
        if (alert_show)
        {
            alert(XD_gsValidateField + blurred.name +
XD_gsValidateRequired);
        }//end alert_show
        blurred.focus();
        blurred.select();
        required_elements[num] = false;
    } //end if length empty
    else if (textfield.value.length > 0)
    {
        blurred = "";
        required_elements[num] = true;
        in_required = false;
    }//end else
} //end if text
}

```

```

function validateRequiredElements() {
    var length = required_elements.length;
    for (var i = 0; i < length; i++){
        if (!required_elements[i]){
            if (required_elements_names[i] == "") {
                alert(XD_gsValidateAllRequiredField + i + XD_gsValidateNotFilled);
                return false;
            } else {
                alert(required_elements_names[i] + XD_gsValidateNotFilled);
                return false;
            }
        } // end of false element
    } // end of array
    return true;
}

function validatePhone(textfield) {
    phoneOK=true;
    var digits = 0;

    //Number can only contains ten digits and proper characters
    for(var i = 0; i < textfield.value.length; i++) {
        var theChar = textfield.value.charAt(i);
        if ((theChar >= "0") && (theChar <= "9")) {
            digits++;
            continue;
        }

        if (theChar == " ") continue;
        if (theChar == "-") continue;
        if (theChar == "(") continue;
        if (theChar == ")") continue;

        //else
        phoneOK = false;
    } //end for

    phoneOK = phoneOK && (digits == 10);
    if (textfield.value == "") {
        phoneOK = true;
    }
    if (!phoneOK) {
        alert(XD_gsValidatePhoneFormat);
    }
}

return phoneOK;
}

//Check that the date is in the form of DD-MON-YY
function validateDate(textfield) {
    dateOK=true;
    if ((textfield.value.charAt(0) > "3") || (textfield.value.charAt(0) < "0")) {
        dateOK=false;
    }
}

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```

        if ((textfield.value.charAt(1) > "9") || (textfield.value.charAt(0) <
"0")) {
            dateOK=false;
        }
        if ((textfield.value.charAt(7) > "9") || (textfield.value.charAt(7) <
"0")) {
            dateOK=false;
        }
        if ((textfield.value.charAt(8) > "9") || (textfield.value.charAt(8) <
"0")) {
            dateOK=false;
        }
        if ((textfield.value.charAt(9) > "9") || (textfield.value.charAt(9) <
"0")) {
            dateOK=false;
        }
        if ((textfield.value.charAt(10) > "9") || (textfield.value.charAt(10) <
"0")) {
            dateOK=false;
        }
        if (textfield.value.charAt(2) != "-") {
            dateOK=false;
        }
        if (textfield.value.charAt(6) != "-") {
            dateOK=false;
        }
        var month = textfield.value.substring(3, 6);
month = month.toUpperCase();
        if (!(month == "JAN" || month == "FEB" ||
month == "MAR" || month == "APR" ||
month == "MAY" || month == "JUN" ||
month == "JUL" || month == "AUG" ||
month == "SEP" || month == "OCT" ||
month == "NOV" || month == "DEC")) {
            dateOK= false;
        }
        if (textfield.value == "") {
            dateOK = true;
        }
        if (!dateOK) {
            alert(XD_gsValidateDateFormat);
        }
    }

    //Check that the date is in the form of DD/MM/YY
    function validateDate_old(textfield) {
        dateOK=true;
        if ((textfield.value.charAt(0) > "9") || (textfield.value.charAt(0) <
"0")) {
            dateOK=false;
        }
        if ((textfield.value.charAt(1) > "9") || (textfield.value.charAt(0) <
"0")) {
            dateOK=false;
        }
        if (textfield.value.charAt(2) != "/") {

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```

        dateOK=false;
    }
    if ((textfield.value.charAt(3) > "3") || (textfield.value.charAt(3) <
"0")) {
        dateOK=false;
    }
    if ((textfield.value.charAt(4) > "9") || (textfield.value.charAt(4) <
"0")) {
        dateOK=false;
    }
    if (textfield.value.charAt(5) != "/"){
        dateOK=false;
    }
    if ((textfield.value.charAt(6) > "9") || (textfield.value.charAt(7) <
"0")) {
        dateOK=false;
    }
    if ((textfield.value.charAt(7) > "9") || (textfield.value.charAt(7) <
"0")) {
        dateOK=false;
    }
    if (textfield.value == "") {
        dateOK = true;
    }
    if (!dateOK) {
        alert(XD_gsValidateDateFormat);
    }
}

// checks to see that the textfield contains only numbers
function validateNum(textfield)
{
    all_numOK = true;

    for (var i=0; i < textfield.value.length; i++)
    {
        var theChar = textfield.value.charAt(i);
        if ((theChar < "0") || (theChar > "9"))
        {
            if (textfield.value != "-1")
            {
                all_numOK = false;
                alert(XD_gsValidateContainNums);
                break;
            } // end of if not -
        } //end if not #
    } //end for

    return all_numOK;
}

// checks to see that the textfield contains two decimal places
function validateMoney(textfield) {

    all_moneyOK = true;
}

```

```

for (var i=0; i < textfield.value.length; i++) {
    var theChar = textfield.value.charAt(i);
    if ((theChar < "0") || (theChar > "9")) {
        if (theChar != ".") {
            all_moneyOK = false;
            alert(XD_gsValidateMoneyFormat);
            break;
        }
    } //end if not #
} //end for

return all_moneyOK;
}

function validateLength(textfield, len)
{
    lengthOK = true;

    if (textfield.value.length < len)
    {
        lengthOK = false;
        alert(textfield.name + XD_gsValidateLengthFormat + len +
XD_gsValidateChars);
    }
}

// attache to delete buttons to confirm
function confirmDelete(textfield) {
    deleteOK = confirm(textfield.value + ": Are you sure?");
}

// attache to other buttons, such as add, to allow them to submit
// after a failed delete confirm
function reset_b() {
    deleteOK = true;
    emailOK = true;
    phoneOK = true;
    dateOK = true;
    lengthOK = true;
    yearOK = true;
    all_numOK = true;
    deleteOK = true;
    var length = required_elements.length;
    for (var i=0; i < length; i++) {
        required_elements[i] = true;
    }
}

// a function to error check with
function test() {
    alert("Testing!")
}

// checks to see that the textfield contains only numbers and is

```

```

//between 13 and 16 characters in length
function validateLengthAndInput(textfield, minLength, maxLength, dateType)
{
    all_numOK = true;

    if ((textfield.value.length<minLength) ||
(textfield.value.length>maxLength))
    {
        all_numOK = false;

        if (minLength == maxLength)
        {
            if (dateType == "ExpDate") {
                alert(XD_gsValidateExpDateFormat);
            }
            else {
                alert(XD_gsValidateDateFormat + maxLength +
XD_gsValidateChars);
            }
        }
        else
        {
            alert(XD_gsValidateCard + minLength + XD_gsValidateAnd +
maxLength + XD_gsValidateChars);
        }
    }

    return all_numOK;
}

for (var i=0; i < textfield.value.length; i++)
{
    var theChar = textfield.value.charAt(i);
    if ((theChar < "0") || (theChar > "9"))
    {
        if (textfield.value != "-1")
        {
            all_numOK = false;
            alert(XD_gsValidateContainNums);
            break;
        } // end of if not -
    } //end if not #
} //end for

return all_numOK;
}

function checkRequired(form)
{
    var complete = true;
    var length = form.elements.length;

    addRequiredElements(form);
    for (var i=0; i<length; i++)
    {
        for (var j=0; j < required_elements_names.length; j++)
        {
            if (form.elements[i].name == required_elements_names[j])

```

```

{
    if ((form.elements[i].type == "text") ||
        (form.elements[i].type == "password") ||
        (form.elements[i].type == "textarea"))
    )
    {
        if (form.elements[i].value == '')
        {
            complete = false;
            break;
        }
    }
    else if (form.elements[i].type == "select-one")
    {
        if (form.elements[i].selectedIndex == 0)
        {
            complete = false;
            break;
        }
    }
    else
    {
        //don't worry about radio button
    }
}

}

if (!complete)
{
    //Temp bug fix: could not read any variable from english_text.js
    //scope problem?
    //was: alert(XD_gsValidateAllRequired)
    alert("A required field is not filled out. Please make sure all
required fields are filled out before hitting submit.");
    return false;
}
else
{
    /*
    Check if we've already submitted
    */

    if (!submitted)
    {
        submitted = true;
        submitCount = 0;
        //took this line out because it was breaking IE
        // and it's not used for submitting the form anyway
        //form.submit();
        return true;
    }
}

```

```

submitCount += 1;

{
    var gender = "";
    var message = "";

    if (form.gender.value == "1" || form.gender.value == "2")
    {
        var gender;
        if (form.gender.value == "1")
        {
            gender = "Dude"
        }
        else
        {
            gender = "Lady"
        }
    }

    if (submitCount == 2)
    {
        message = " Hey " + gender + " give me a second while I send
info";
    }
    if (submitCount == 3)
    {
        message = "Okay... now your just pressing too much";
    }
    if (submitCount > 1 && submitCount < 4)
    {

        alert(message);
    }
}

return false;
}

function CheckPassword(form)
{
    var length = form.elements.length;
    var change=1;
    //Make sure passwords match
    if (form.elements[1].value !=
        form.elements[2].value)
    {
        alert(XD_gsValidatePasswords);
        change=0;
        return false;
    }

    if (change==1)
    {

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```
        form.submit();
    }
    return true;
}
```

## //xparse.js

```
function _element()
{
    this.type = "element";
    this.name = new String();
    this.attributes = new Array();
    this.contents = new Array();
    this.uid = _Xparse_count++;
    _Xparse_index[this.uid]=this;

    // Added by Martin Hald
    this.attributes.folder = 0;
}

function _chardata()
{
    this.type = "chardata";
    this.value = new String();
}

function _pi()
{
    this.type = "pi";
    this.value = new String();
}

function _comment()
{
    this.type = "comment";
    this.value = new String();
}

// an internal fragment that is passed between functions
function _frag()
{
    this.str = new String();
    this.ary = new Array();
    this.end = new String();
}

///////////////////
// global vars to track element UID's for the index
var _Xparse_count = 0;
var _Xparse_index = new Array();

///////////////////
//// Main public function that is called to
//// parse the XML string and return a root element object

function Xparse(src)
{
    // Hack added by Martin Hald to fix the grove[x] not an object error
```

```

// where the grove object array indexes was shifted up by the previous
// parsing
_Xparse_count = 0;

var frag = new _frag();

// remove bad \r characters and the prolog
frag.str = _prolog(src);

// create a root element to contain the document
var root = new _element();
root.name= XD_gsRootPath;
root.attributes.folder = 1;
root.attributes.show = 1;

// main recursive function to process the xml
frag = _compile(frag);

// all done, lets return the root element + index + document
root.contents = frag.ary;
root.index = _Xparse_index;
_Xparse_index = new Array();

return root;
}

////////////

///////////
//// transforms raw text input into a multilevel array
function _compile(frag)
{
    // keep circling and eating the str
    while (1)
    {
        // when the str is empty, return the fragment
        if (frag.str.length == 0)
        {
            return frag;
        }

        var TagStart = frag.str.indexOf("<");

        if (TagStart != 0)
        {
            // theres a chunk of characters here, store it and go on
            var thisary = frag.ary.length;
            frag.ary[thisary] = new _chardata();
            if (TagStart == -1)
            {
                frag.ary[thisary].value = _entity(frag.str);
                frag.str = "";
            }
            else
            {

```

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        frag.ary[thisary].value =
.getEntity(frag.str.substring(0,TagStart));
        frag.str = frag.str.substring(TagStart,frag.str.length);
    }
}
else
{
// determine what the next section is, and process it
if (frag.str.substring(1,2) == "?")
{
    frag = _tag_pi(frag);
}
else
{
    if (frag.str.substring(1,4) == "!--")
    {
        frag = _tag_comment(frag);
    }
    else
    {
        if (frag.str.substring(1,9) == "![CDATA[")
        {
            frag = _tag_cdata(frag);
        }
        else
        {
            if (frag.str.substring(1,frag.end.length + 3) == "/" +
frag.end + ">" || _remove_escapes(frag.str.substring(1,frag.end.length + 3)) ==
"/" + frag.end)
            {
                // found the end of the current tag, end the
recursive process and return
                frag.str = frag.str.substring(frag.end.length +
3,frag.str.length);
                frag.end = "";
                return frag;
            }
            else
            {
                frag = _tag_element(frag);
            }
        }
    }
}
}
return "";
}

///////////

```

```

///////////
/// functions to process different tags
function XDTrueSpaceIndex(frag)
{

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var length = frag.length;
for (var i=0; i < length; i++)
{
  if ( (frag.charAt(i) == " ")
    &&(frag.charAt(i-1) != "\\\")

  )
  {

    break;
  }
}

return i;
}

function _tag_element(frag)
{
// initialize some temporary variables for manipulating the tag
var close = frag.str.indexOf(">");
var empty = (frag.str.substring(close - 1,close) == "/");
if (empty)
{
  close -= 1;
}

// split up the name and attributes
var starttag = _normalize(frag.str.substring(1,close));
//var nextspace = starttag.indexOf(" ");
var nextspace = XDTrueSpaceIndex(starttag);
var attribs = new String();
var name = new String();
if (nextspace != -1)
{
  name = starttag.substring(0,nextspace);
  attribs = starttag.substring(nextspace + 1,starttag.length);
}
else
{
  name = starttag;
}

var thisary = frag.ary.length;
frag.ary[thisary] = new _element();
frag.ary[thisary].name = _remove_escapes(name);

if (attribs.length > 0)
{
  frag.ary[thisary].attributes = _attribution(attribs);
}

if (!empty)
{
  // !!!! important,
  // take the contents of the tag and parse them
  var contents = new _frag();
}

```

```

        contents.str = frag.str.substring(close + 1,frag.str.length);
        contents.end = name;
        contents = _compile(contents);
        frag.ary[thisary].contents = contents.ary;
        frag.str = contents.str;
    }
else
{
    frag.str = frag.str.substring(close + 2,frag.str.length);
}
return frag;
}

function _tag_pi(frag)
{
    var close = frag.str.indexOf(">?>");
    var val = frag.str.substring(2,close);
    var thisary = frag.ary.length;
    frag.ary[thisary] = new _pi();
    frag.ary[thisary].value = val;
    frag.str = frag.str.substring(close + 2,frag.str.length);
    return frag;
}

function _tag_comment(frag)
{
    var close = frag.str.indexOf("-->");
    var val = frag.str.substring(4,close);
    var thisary = frag.ary.length;
    frag.ary[thisary] = new _comment();
    frag.ary[thisary].value = val;
    frag.str = frag.str.substring(close + 3,frag.str.length);
    return frag;
}

function _tag_cdata(frag)
{
    var close = frag.str.indexOf("]]>");
    var val = frag.str.substring(9,close);
    var thisary = frag.ary.length;
    frag.ary[thisary] = new _chardata();
    frag.ary[thisary].value = val;
    frag.str = frag.str.substring(close + 3,frag.str.length);
    return frag;
}

///////////////////////
///////////////////////
////// util for element attribute parsing
////// returns an array of all of the keys = values
function _attribution(str)
{
    var all = new Array();
    while (1)
    {

```

```

var eq = str.indexOf("=");
if (str.length == 0 || eq == -1)
{
    return all;
}

var id1 = str.indexOf("\'");
var id2 = str.indexOf("\"");
var ids = new Number();
var id = new String();
if ((id1 < id2 && id1 != -1) || id2 == -1)
{
    ids = id1;
    id = "\'";
}
if ((id2 < id1 || id1 == -1) && id2 != -1)
{
    ids = id2;
    id = "\"";
}
var nextid = str.indexOf(id,ids + 1);
var val = str.substring(ids + 1,nextid);

var name = xstrip(str.substring(0,eq));
var entity = new String();
entity = _entity(val);
all[name] = entity;
str = str.substring(nextid + 1,str.length);
}
return all;
}
///////////
///////////
////// util to remove \r characters from input string
////// and return xml string without a prolog
function _prolog(str)
{
var A = new Array();

A = str.split("\r\n");
str = A.join("\n");
A = str.split("\r");
str = A.join("\n");

var start = str.indexOf("<");
if (str.substring(start,start + 3) == "<?x" || str.substring(start,start +
3) == "<?X" )
{
    var close = str.indexOf("?>");
    str = str.substring(close + 2,str.length);
}
var start = str.indexOf("<!DOCTYPE");
if (start != -1)
{
    var close = str.indexOf(">",start) + 1;
}
}

```

```

var dp = str.indexOf("[",start);
if (dp < close && dp != -1)
{
    close = str.indexOf("]>",start) + 2;
}
str = str.substring(close,str.length);
}
return str;
}
///////////
function _remove_escapes (str)
{
var A = new Array();
A = str.split("\\");
str = A.join("");
return str;
}

///////////
//// util to remove white characters from input string
function xstrip(str)
{
A = str.split(" ");
str = A.join("");
A = str.split("\n");
str = A.join("");
A = str.split("\t");
str = A.join("");

//A = str.split(" ");
//str = A.join("nbsp;");
//A = str.split("\n");
//str = A.join("");
//A = str.split(" ");
//str = A.join("");
//A = str.split("\t");
//str = A.join("");

return str;
}
///////////

///////////
//// util to replace white characters in input string
function _normalize(str)
{
var A = new Array();

A = str.split("\n");
str = A.join(" ");
A = str.split("\t");
str = A.join(" ");

return str;
}

```

```
}

///////////



///////////
/// util to replace internal entities in input string
function _entity(str)
{
    var A = new Array();

    //A = str.split("<");
    //str = A.join("<");
    //A = str.split(">");
    //str = A.join(">");
    //A = str.split(""");
    //str = A.join("'");
    //A = str.split("&apos;");
    //str = A.join("'");

    //A = str.split("&");
    //str = A.join("&");

    //Get rid of any escapes
    A = str.split("\\");
    str = A.join("");

    return str;
}
///////////
```